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Case Number

11-346-EL-SSO

11-348-EL-SSO

11-349-EL-AAM

11-350-EL-AAM

File Date:

01/27/2011

Section: 1 of 3

Number of Pages: 201

Description of Document: Volume 2

EXHIBIT NO.	
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## BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of	)	
Columbus Southern Power Company and	j .	
Ohio Power Company for Authority to	<b>)</b>	Case No. 11-346-EL-SSO
Establish a Standard Service Offer	)	Case No. 11-348-EL-SSO
Pursuant to §4928.143, Ohio Rev. Code,	)	•
in the Form of an Electric Security Plan.	)	•
In the Matter of the Application of	)	
Columbus Southern Power Company and	j .	Case No. 11-349-EL-AAM
Ohio Power Company for Approval of	j .	Case No. 11-350-EL-AAM
Certain Accounting Authority.	Ś	

#### **VOLUME 2**

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ON BEHALF OF COLUMBUS SOUTHERN POWER COMPANY AND OHIO POWER COMPANY

Filed: January 27, 2011

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<b>EXHIBIT</b>	NO
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DIRECT TESTIMONY OF
JAY F. GODFREY
ON BEHALF OF
COLUMBUS SOUTHERN POWER COMPANY
AND
OHIO POWER COMPANY

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# BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO DIRECT TESTIMONY OF JAY F. GODFREY ON BEHALF OF COLUMBUS SOUTHERN POWER COMPANY AND OHIO POWER COMPANY

#### **INTRODUCTION**

1 (	Ο.	PLEASE	STATE YOUR	NAME. P	POSITION AND	<b>BUSINESS ADDRESS.</b>
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- A. My name is Jay F. Godfrey. I am employed as Managing Director Renewable

  Energy for American Electric Power Service Corporation (AEPSC), a wholly

  owned subsidiary of American Electric Power, Inc (AEP). AEPSC supplies

  engineering, financing, accounting, commercial and similar planning and advisory

  services to AEP's eleven electric operating companies, including Columbus

  Southern Power (CSP) and Ohio Power Company (OPCo), collectively referred to
- 8 as AEP Ohio or the Company. My business address is 155 West Nationwide
- 9 Boulevard, Columbus, Ohio 43215.

#### **BACKGROUND**

- 10 Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND
- 11 BUSINESS EXPERIENCE.
- 12 A. I earned a Bachelor's degree in Business Administration from California State
- 13 University Chico in 1985 and a Master's degree in Business Administration from
- National University in 1990. In 2006, I completed the AEP Strategic Leadership
- Program at The Ohio State University Fisher School of Business.
- I have over fifteen years of commercial and financial management

experience in the renewable energy industry. Prior to joining AEPSC's wind energy group in 2002, I worked for seven years (1995 – 2002) in various project finance and wind project development roles in Europe and the U.S. for Enron Wind Corporation (EWC), since acquired by General Electric (GE), which operates today as GE Energy. Other business management experience includes serving as the Financial Controller for two publicly held companies in non-energy related fields, and holding other management positions.

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Since joining AEPSC, I have been involved in the asset management and project financing of AEP's two owned wind projects which total 310 MW, development efforts for potential green-field projects, and the procurement and management of AEP's wind and solar renewable energy purchase agreements which now total approximately 1,485.1 MW. My experience includes negotiating wind and solar energy power purchase and sales agreements, wind system operations and maintenance agreements, real estate agreements related to wind and solar projects, wind turbine purchase agreements, and project loan documents. I also have experience evaluating the impact of various financial parameters on wind and solar project investment returns. I serve on the Board of Directors of the American Wind Energy Association (AWEA), the Washington D.C. based trade association for the wind industry, and currently serve as chair to the AWEA Utility Working Group which advises that same Board. I also serve on the Renewable Energy Council of the Electric Power Research Institute (EPRI), an independent, non-profit company performing research, development and demonstration in the electricity sector for the benefit of the public.

#### 1 Q. WHAT ARE YOUR RESPONSIBILITIES AS MANAGING DIRECTOR -

#### 2 RENEWABLE ENERGY?

3 A. As Managing Director – Renewable Energy, I am responsible for managing AEP's 4 portfolio of Renewable Energy Power Purchase Agreements (REPAs) and related 5 long-term structured greenhouse gas / carbon credit offset agreements. I direct the 6 team that structures and issues the renewable energy Requests for Proposals (RFPs) 7 and model REPAs, reviews and responds to questions posed by potential bidders, 8 and evaluates proposals. I also lead the team that negotiates and finalizes the 9 REPAs with the winning bidder(s). In addition, I am responsible for the acquisition 10 of potential new wind and solar project development opportunities within AEP's 11 service territory.

#### 12 Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE ANY REGULATORY

#### COMMISSIONS?

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14 Yes, I have presented testimony or testified on behalf of CSP and OPCo in prior Α. 15 proceedings before the Public Utilities Commission of Ohio (Commission). I have 16 presented testimony or testified on behalf of Indiana Michigan Power Company 17 before the Indiana Utility Regulatory Commission, the Indiana State Regulatory 18 Flexibility Committee and the Michigan Public Service Commission. I have 19 presented testimony or testified on behalf of Appalachian Power Company before 20 the Virginia State Corporation Commission. I have presented testimony or testified 21 on behalf of Kentucky Power before the Public Service Commission of Kentucky. I 22 have presented testimony or testified on behalf of Public Service Company of

- 1 Oklahoma before the Corporation Commission of the State of Oklahoma. Finally, I
- 2 have presented testimony or testified before the Public Utility Commission of Texas
- 3 on behalf of Southwestern Electric Power Company.

#### 4 **PURPOSE OF TESTIMONY**

#### 5 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS

#### 6 **PROCEEDING?**

- 7 A. The purpose of my testimony in this proceeding is threefold: First, I will support
- 8 AEP Ohio's request for the Commission to establish prudency and allow for the
- 9 cost recovery of a 20-year Ohio based wind REPA. Second, I will also be
- supporting Company witness Nelson as it relates to establishing prudency of future
- 11 renewable energy compliance purchases via RFPs for long-term REPAs during the
- 12 2012-2014 ESP period and beyond. Finally, I will support AEP Ohio's request for
- 13 the Commission to establish prudency and allow for cost recovery through a
- Generation Resource Rider (GRR), explained by Company witness Nelson, for a
- proposed new Ohio solar generation facility.

#### 16 Q. ARE YOU SPONSORING ANY EXHIBITS IN THIS PROCEEDING?

- 17 A. Yes. I am sponsoring exhibits
- 18 JFG-1 1,100 MW Renewable Resources Solicitation (RFP)
- 19 JFG-2A Timber Road Wind REPA Summary (Public)
- 20 JFG-2B Timber Road Wind REPA Summary (Confidential)
- 21 JFG-3A Timber Road Wind REPA for OP (Public)
- 22 JFG-3B Timber Road Wind REPA for OP (Confidential)
- 23 JFG-4A Timber Road Wind REPA for CSP (Public)

- 1 JFG-4B Timber Road Wind REPA for CSP (Confidential)
- 2 JFG-5 Turning Point Solar Project Term Sheet (Public)

#### 3 <u>AEP RENEWABLE ENERGY EXPERIENCE</u>

- 4 Q. DOES AEP HAVE EXEPERIENCE ENTERING INTO LONG-TERM
- 5 RENEWABLE ENERGY PURCHASE AGREEMENTS?
- 6 A. Yes. AEP has entered into eighteen long-term renewable energy purchase
- 7 agreements to serve customers of six of its regulated electric operating companies.
- 8 Currently, AEP regulated affiliates have long-term agreements to purchase the
- 9 energy output from three wind facilities located in Illinois, three wind facilities
- located in Indiana, six wind facilities located in Oklahoma, one wind facility
- located in West Virginia, one wind facility located in Texas and a hydro facility
- located in West Virginia. As stated previously, AEP Ohio has also recently entered
- in to a long-term REPA for solar energy from a facility in Ohio. Please see Table 1
- for the allocation of these contracts to the AEP regulated operating companies.
- 15 Q. DOES AEP HAVE EXPERIENCE IN OWNING AND OPERATING
- 16 RENEWABLE FACILITIES?
- 17 A. Yes. Besides the eighteen long-term renewable generation purchase agreements
- described above, the various AEP Operating Companies own and operate seventeen
- 19 hydro facilities located in Indiana, Michigan, Virginia and West Virginia totaling
- 20 845.5 MW. Additionally, AEP Energy Partners, a non-regulated AEP subsidiary is
- an owner/operator of two wind facilities totaling 310 MW. They also purchase the
- 22 output under long-term contracts from two additional wind projects totaling 177
- 23 MW. All four above mentioned wind projects are located in the ERCOT region of

1 Texas.

#### 2 Q. WOULD YOU PLEASE SUMMARIZE THE MAGNITUDE AND NATURE

#### 3 OF AEP'S EXISTING RENEWABLE GENERATION RESOURCES?

- 4 A. AEP currently has 1,485.1 MW of long-term renewable energy resources under
- 5 contract for its regulated affiliates, as shown in Table 1. Table 1, shown below, lists
- 6 the existing REPAs for each regulated operating company.

TABLE 1:
AEP Operating Companies' Long-Term Renewable Energy Power Purchase Agreements

AEP Operating Company	Resource Type	Owner	Project	Month/Year of Commercial Operation	Contracted Quantity (MW)
Appalachian Power Company	Hydro	Gauley River Power Partners	Summersville Hydro		80
Public Service Company of Oldahoma	Wind	Horizon Wind Energy	Blue Canyon II	December 2005	151.2
Public Service Company of Oklahoma	Wind	NextEra Energy	Weatherford	April 2005	147
Public Service Company of Oldahoma	Wind	Edison Mission	Sleeping Bear	October 2007	94.5
Indiana Michigan Power	Wind	BP/Dominion	Fowler I	January 2009	100
Appalachian Power Company	Wind	BP Wind Energy	Fowler III	February 2009	100
Appalachian Power Company	Wind	Orion	Camp Grove	January 2008	75
Appalachian Power Company	Wind	Invenergy LLC	Beech Ridge	June 2010	100.5
Southwestern Electric Power Company	Wind	NextEra Energy	Majestic	January 2009	79.5
Public Service Company of Oklahoma	Wind	NextEra Energy	Elk City	Decmber 2009	98.9
Public Service Company of Oklahoma	Wind	Horizon Wind Energy	Blue Canyon V	December 2009	99
Appalachian Power Company	Wind	Invenergy LLC	Grand Ridge II	December 2009	51
Appalachian Power Company	Wind	Invenergy LLC	Grand Ridge III	December 2009	49.5
Indiana Michigan Power	Wind	BP Wind Energy	Fowler II	December 2009	50
Ohio Power Company	Wind	BP Wind Energy	Fowler II	December 2009	50
Columbus Southern Power	Wind	BP Wind Energy	Fowler II	December 2009	50
Ohio Power Company & Columbus					
Southern Power Company	Solar	PSEG	Wyandot Solar	May 2010	10.1
Public Service Company of Oklahoma	Wind	NextEra Energy	Mineo	December 2010	98.9
Total					1,485.1

#### 7 OHIO RENEWABLE ENERGY MARKET

- 8 Q. PLEASE DESCRIBE THE MARKET FOR RECS IN OHIO AND ANY
- 9 COMPLIANCE IMPEDIMENTS THE COMPANY IS FACING.
- 10 A. As the Company stated in its 2009 Alternative Energy Compliance filings (filed
- 11 April 15, 2010; Case Nos. 10-0484-EL-ACP and 10-0485-EL-ACP); compliance
- with the benchmarks set forth in Ohio SB 221 can be summed up by describing

supply versus demand. The demand side of the equation is relatively clear as the legislation states which entities are subject to the increasing benchmarks. While there are factors that influence demand, the quantity of RECs needed annually by each entity can be easily derived, but the supply side of the equation is subject to much more volatile factors. These factors have included such items as available capital and associated timing for self-build options, number of suppliers submitting projects for certification by the Commission, the number of projects that are submitted and subsequently approved for construction by the Ohio Power Siting Board, projects successfully navigating the PJM interconnection queue process, projects actually being built that are approved, speculators and/or entities subject to the benchmark acquiring RECs beyond current year compliance and banking for the allowable five year period. All of the above mentioned impediments have a direct correlation to the available REC supply in Ohio.

Non Solar: The impacts of the supply constraints for non-solar Ohio RECs is illustrated by the results from the four RFPs AEPSC issued in 2010 on behalf of AEP Ohio. An RFP in April 2010 received three bids, one of which was priced unreasonably high. Another RFP in August 2010 yielded zero bids. A third RFP in October 2010 received two bids, one of which again was priced unreasonably high. Additionally, the fourth RFP in November 2010 resulted in one response which was identical to the previous unreasonably high offer. It is the Company's opinion that the insufficient supply of non-solar Ohio RECs in 2010 provided upward pressure on prices for Ohio RECs. No significant non-solar renewable generation has come online in Ohio since passage of SB 221.

Additionally, based on the minimal number of participants in the 2010 AEP Ohio non-solar REC RFPs, the Company believes that there is an insufficient supply of reasonably priced non-solar RECs being made available in the market to achieve compliance.

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Solar: The Commission acknowledged the lack of supply in the Ohio solar REC market when it granted AEP Ohio's request for Force Majeure for the 2009 compliance year. In October of 2009, AEP Ohio filed an application with the Commission to amend the Company's 2009 solar energy benchmarks and requested that the Commission determine for solar benchmark compliance purposes a finding of Force Majeure (October 2009, Case No. 09-0987-EL-EEC) due to the lack of supply in the Ohio solar REC market. Also in 2009, AEP Ohio issued an Ohio solar REC only RFP for which no bids were received. The Commission acknowledged the lack of supply in the Ohio solar REC market and granted AEP Ohio's request for force majeure. This decision allowed the Company to add the 2009 solar benchmark shortfall amounts to its 2010 compliance benchmark. In June 2009, the Company also entered into a long-term REPA for the output from the 10.1MW Wyandot solar generation facility located near Upper Sandusky, Ohio. This new solar facility came on-line in April of 2010, and will aid the Company in complying with the 2010 and 2011 solar portion of the renewable energy benchmarks. However, even with the RECs from the Wyandot REPA, AEP Ohio will find itself short of solar RECs by the end of 2012 due to the increasing solar benchmarks it must meet for compliance.

Additional Market Constraints: Since RECs have a five-year lifespan from their date of sale (and unlimited lifespan for RECs produced by owned renewable generation) buyers are inclined to bank the RECs for future use further reducing supply in the market. Meanwhile, REC demand is further heightened by the participation of Competitive Retail Electric Service (CRES) providers, as RECs are essentially being procured twice for each customer who switches to a CRES provider in a given year (once by the utility, and once by the CRES).

## 8 Q. HOW HAS THE OHIO RENEWABLE MARKET IMPEDIMENT

#### INFLUENCED AEP OHIO'S PROCUREMENT STRATEGY?

Α.

As can be evidenced from the constrained Ohio REC market, supply certainty is a risk that must be considered while procuring resources for AEP Ohio's renewable energy benchmark compliance portfolio used to meet the annually escalating benchmarks. Long-term REPAs and or self build options are excellent strategies for AEP Ohio to secure reasonably priced reliable sources of renewable energy and to ensure that this energy will be economically accessible to its customers in the coming years. Simply put, significant new renewable energy generation resources are unlikely to be built in Ohio unless utilities are able to obtain the adequate assurances that they can obtain full and prompt recovery for the costs associated with long-term investments in renewable energy assets and/or long-term contracts with developers of renewable energy assets. These long-term assurances are essential to enable owners of renewable generation assets to raise the necessary capital in the markets to build these types of assets, which are not generally the least-cost generation resource in the market.

#### RFP FOR OHIO REPAS

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- 2 Q. GENERALLY DESCRIBE THE RFP AND THE PROCESS
- 3 IMPLEMENTED FOR CONDUCTING THE RFP?
- 4 A. AEPSC, as agent for AEP Ohio and the other six AEP operating companies issued 5 an RFP on June 1st, 2009 attached as Exhibit JFG-1. The bids sought by the 1,100 6 MW Renewables RFP was for projects that would be interconnected to the PJM 7 Interconnection (PJM) or the Southwest Power Pool (SPP) with a minimum 20 8 MW (nameplate) of new renewable generation capable of being operational by 9 December 31, 2011. This RFP process was used to fulfill a portion of AEP Ohio's 10 renewable energy benchmarks established by SB 221. Although the RFP solicited 11 bids for projects interconnected anywhere in the PJM or SPP RTOs, AEP Ohio only 12 considered project bids sited in Ohio due to its specific need for in-state renewable 13 resources. The RFP stipulated that all initial and future outputs of the facility, 14 including energy, capacity, and environmental attributes, including RECs, be sold 15 to AEP Ohio through a REPA for a term of 20 years. The bidder is required to 16 deliver its electrical output to the transmission system (a substation bus) of a PJM 17 member. The bidder is also responsible for any feasibility or impact studies and 18 upgrades required to the transmission system to accommodate the facility's 19 electrical output. Bidders were required to offer "all-in" pricing, which includes all 20 fixed and variable costs associated with capital expenditures, operation and 21 maintenance (O&M), and any other costs associated with delivering the full output 22 of the facility to the delivery point.

The RFP included a Form REPA, which defined items such as terms and conditions of service, commercial operation and construction of the facility, delivery and metering, O&M, performance assurance, insurance, permitting and licensing, Supervisory Control and Data Acquisition (SCADA) requirements, billing and settlement terms, and credit and collateral requirements. The REPA serves as the contract between the Seller (awarded bidder) and AEP Ohio.

The RFP required bidders to document their financial and technical capabilities to ensure the successful construction of the project, and to demonstrate that they had successfully completed the development, financing, and commissioning of at least one utility scale renewable energy project in the United States with characteristics similar to the project defined in the RFP. For wind projects, AEPSC required bidders to provide a summary of the wind speed data, including meteorological source and basis, used in the development of energy projections for the project. This data was to include an 8,760 hour calendar year wind forecast for the proposed hub height. In addition, the RFP required that proposals contain an 8,760 hour calendar year energy production profile, including losses, adjusted for the proposed site's air density, fully explaining all assumptions, extrapolations, and adjustments, and disclosing the proposed wind turbine power curve.

Proposals were to include detailed data on the proposed project location and construction schedule, including site plans, interconnection status and requirements, permitting requirements, documentation of secured land rights, financing plans, and other documentation demonstrating that the bidder has the

ability and legal right to construct, interconnect, and operate the project as proposed. Site plans were to include a detailed technical description of the proposed project, including commercial operating experience of the proposed wind generator and warranty terms. Plans were also to include a detailed description of the proposed data acquisition and monitoring system to supply AEP Ohio with real-time operational data.

To maximize interest and response from bidders, AEPSC conducted the RFP on behalf of the seven AEP operating companies and conducted public bid webinars open to all interested parties, including regulators, if they so desired to participate.

AEPSC issued a news release on June 1, 2009, to various renewable and energy industry publications to notify entities that may have an interest in participating in the RFP. The RFP was also announced on the DOE Energy Efficiency and Renewable Energy's "The Green Power Network" web site and was publicly posted on AEP's web site at <a href="https://www.aep.com/go/rfp">www.aep.com/go/rfp</a> and <a href="https://www.aep.com/go/rfp">www.aep.com/go/rfp</a> and <a href="https://www.aepohio.com/b2b/rfp">www.aepohio.com/b2b/rfp</a>.

#### 17 Q. HOW WAS AEP'S RENEWABLE ENERGY EXPERIENCE BENEFICIAL

#### IN DEVELOPING THE RFP AND SUBSEQUENT WIND REPA?

A. AEP is able to leverage its experience as a renewable generation developer, owner, operator, and seller, along with its experience conducting RFPs and negotiating long-term renewable energy agreements, to effectively balance the interests of the developer, AEP Ohio and its customers.

#### Q. WHAT ROLE DID YOU HAVE IN THE RFP PROCESS?

- A. My involvement in the RFP process was to ensure that the RFP conformed with

  AEP's intent to competitively bid and secure additional renewable resources on

  behalf of its regulated operating companies. As with past RFPs, I directed the entire
- 4 process including those individuals that structured and issued the RFP, reviewed
- 5 and responded to questions posed by potential bidders, evaluated the proposals,
- 6 negotiated with "short-listed" bidders, and selected the winning proposal(s).

#### 7 Q. HOW DID AEPSC PROCESS AND EVALUATE THE BIDS IT RECEIVED.

#### 8 IN RESPONSE TO THE RFP?

- 9 A. AEPSC first reviewed each proposal to determine if all of the required information
- was provided. AEPSC then ranked all of the conforming proposals based on
- pricing structure, and developed a "short list" of proposals for further (post-bid)
- 12 negotiations.

#### 13 Q. WOULD YOU PLEASE CHARACTERIZE THE BIDS AEPSC RECEIVED

#### 14 IN RESPONSE TO THE RFP?

- 15 A. Yes. AEPSC received 33 conforming bids from renewable energy developers for
- projects interconnected to PJM totaling roughly 3,450 MW of renewable energy
- 17 nameplate capacity. Of the 33 bids, 8 bids were for projects located in Ohio. Based
- upon AEP Ohio's need for Ohio sourced RECs to meet its compliance benchmarks,
- only the bids for Ohio sited projects were considered.

#### 20 Q. WHAT WAS THE RESULT OF THE RFP PROCESS?

- 21 A. Based on AEP Ohio's need for in-state renewables and a final analysis of all
- relevant factors affecting both AEP Ohio and its customers, AEPSC selected the
- proposal from Paulding Wind Energy LLC (a wholly owned subsidiary of Horizon

Wind Energy LLC) for its 99 MW (nameplate) Timber Road wind farm. AEP Ohio and Paulding executed, subject to any necessary regulatory approval for cost recovery, the Timber Road Wind REPA (Wind REPA) at an attractive contract price that benefits from federal grant funding administered under Internal Revenue Code Section 48(d) and Section 1603 of the American Recovery and Reinvestment Tax Act of 2009. A summary of the terms and conditions of the Wind REPA resulting from the RFP process is attached to my testimony as Exhibits JFG-2A and JFG-2B (confidential and public versions), and the Wind REPA is attached to my testimony as Exhibits JFG-3A, JFG-3B, JFG-4A and JFG-4B (confidential and public versions).

The Timber Road REPA that was a result of the RFP process fulfills AEP Ohio's need to secure additional in-state renewable energy to meet its annually increasing renewable energy benchmarks established by SB 221. The Timber Road REPA will supply a 99 MW share of Timber Road wind farm's electrical output, capacity and environmental attributes to AEP Ohio for a period of 20 years at a reasonable cost and terms for the Company and its customers; effective with the approval of the cost recovery and finding of prudency sought in this petition.

# Q. IS THE TIMBER ROAD WIND REPA CONTINGENT UPON COMMISSION APPROVED COST RECOVERY?

A. Yes it is. If the Commission were to deny cost recovery of the Timber Road Wind REPA, AEP Ohio would not be obligated under Article 6 of the REPA to purchase the output from the Timber Road wind farm. AEP Ohio could at that time terminate the REPA with no further obligations to the Company.

#### HORIZON/TIMBER ROAD WIND REPA

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2	Q.	WOULD YOU PLEASE DESCRIBE THE WIND ENERGY GENERATION
3		FACILITY TO BE CONSTRUCTED IN PAULDING COUNTY OHIO?
4	A.	The Timber Road wind project, which is owned by Paulding Wind Energy LLC, is
5		being developed under the direction of its parent company, Horizon Wind Energy
6		LLC, in Paulding County Ohio. The facility will have a nameplate capacity
7		(maximum output) of 99 MW and will consist of fifty-five Vestas V100 - 1.8MW
8		wind turbines. The Timber Road Wind Farm will interconnect with the existing
9		AEP Ohio transmission system at 138 kV and will reach commercial operation by
10		December 31, 2011.
11	Q.	WHAT EXPERIENCE DOES HORIZON WIND ENERGY LLC HAVE IN
12		THE WIND GENERATION BUSINESS?
13	A.	Horizon Wind Energy LLC ("Horizon") develops, constructs, owns and operates
14		wind farms throughout North America. Based in Houston, Texas with over 20
15		offices and over 20 wind farms across the United States, Horizon has developed
16		3,600 MW (nameplate) and operates over 3,300 MW of wind farms. Horizon is
17		currently the third largest wind energy developer in the United States.
18	Q.	WHAT IS THE ADVANTAGE OF EXECUTING THE 20-YEAR WIND
19		REPA ON BEHALF OF AEP OHIO?
20	A.	The 20-year term of the Timber Road REPA provides a direct benefit to the
21		consumer. The 20-year agreement, which is also the expected life of the
22		technology, allows renewable energy resource providers to secure long-term

financing, thereby amortizing the cost of their projects over a longer period. Such

financing has the effect of reducing the upfront costs and allows for a more
economically levelized price over the term of the contract. The 20-year term also
provides price certainty for AEP Ohio's customers.

#### 4 Q. WOULD YOU PLEASE DESCRIBE THE RECS THAT AEP OHIO WILL

#### OBTAIN IN CONJUNCTION WITH THE TIMBER ROAD REPA?

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A.

The Timber Road REPA stipulates that AEP Ohio will receive all current and future environmental attributes from the Project, including the associated Ohio non-solar RECs. Each REC is legal proof that one megawatt-hour (MWh) of electricity has been generated by a renewable-fueled or environmentally friendly resource. The RECs will be tracked through the PJM Generation Attribute Tracking System (GATS). Administered by PJM Environmental Services, Inc., GATS is a database that tracks the ownership of RECs and generation attributes that result from the generation of electricity as they are traded or used to meet government standards. GATS provides environmental and emissions attributes reporting and tracking services to its subscribers in support of RPS and other information disclosure requirements that may be implemented by government agencies. The RECs associated with the Timber Road REPA demonstrate that AEP Ohio has obtained all attributes associated with the renewable energy produced by the wind facility. These RECs are what AEP Ohio will use, in part, to demonstrate its compliance with the non-solar in-state portion of Ohio's annual renewable energy benchmarks established by SB 221.

1 <b>Q</b> .	HOW	WILL	THE	TIMBER	ROAD	WIND	REPA	ASSIST	AEP	ОНЮ	IN
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2 COMPLIANCE WITH THE NON-SOLAR RENEWABLE ENERGY

AEP Ohio's year end non-solar renewable energy benchmark will increase from

1.44% in 2012 to 2.38% of sales in 2014. The benchmark percentages are applied

- 3 BENCHMARK S ESTABLISHED BY SB 221?
- 6 to a preceding three-year average of AEP Ohio's normalized retail sales adjusted 7 for economic growth. As can be seen in the Company's Supplement To The 2010 8 Long-Term Forecast Report (2010 LTFR Supplement) filed in Case Nos. 10-501-9 EL-FOR and 10-502-EL-FOR on December 20, 2010, the non-solar portion of the 10 Company's renewable energy benchmarks increase significantly over the 2012-11 2014 ESP period. Additionally, 50% of the non-solar benchmark must be met with 12 RECs produced by renewable energy resources sited in Ohio. Although this ESP 13 filing only pertains to years 2012-2014, the Company has developed a long-term
- (included in the 2009 Alternative Energy Compliance filings referenced above).

  This strategy includes such items as purchasing RECs and securing REPAs,

strategy in order to meet the renewable energy benchmarks set forth in SB 221

- pursuing ownership of certain renewable energy resource generation, development
- of customer-sited distributed renewable generation and co-firing biomass which is
- 19 discussed further by Company witness Nelson. The Timber Road wind REPA will
- 20 contribute to compliance with the in-state portion of the non-solar renewable energy
- 21 benchmark.

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- 22 Q. IN SUMMARY, IS IT YOUR OPINION THAT THE TIMBER ROAD WIND
- 23 REPA IS A PRUDENT AND VALUABLE RENEWABLE ENERGY

#### 1 RESOURCE FOR AEP OHIO AND ITS CUSTOMERS?

2 A. Yes it is.

#### 3 RFP PROCESS FOR FUTURE LONG-TERM CONTRACTS

- 4 Q. HOW DOES THE COMPANY PROPOSE TO ESTABLISH THE
- 5 PRUDENCY OF RENEWABLE COMPLIANCE PURCHASES ENTERED
- 6 INTO DURING THE NEXT ESP PERIOD AND WHICH EXTEND
- 7 BEYOND THAT ESP PERIOD?
- 8 A. The Company is proposing a transparent, open process for the procurement of
- 9 RECs and or bundled product REPAs to meet their renewable energy compliance
- benchmarks under SB 221. The RFP process for long-term contracts, which is
- described by Company witness Nelson, will allow for AEPSC (as agent for AEP
- Ohio) to administer RFPs to meet future compliance needs. Under the proposed
- process, the RFP will be reviewed with the Commission in order to establish the
- prudency of the RFP process and its results.
- 15 Q. PLEASE DESCRIBE AEP'S EXPERIENCE WITH CONDUCTING RFPs.
- 16 A. As discussed in detail earlier in this testimony, AEPSC possesses a wealth of
- industry experience and knowledge pertaining to RFPs for renewable energy. In
- the past three years alone, AEPSC has conducted RFPs on behalf of seven different
- affiliated Operating Companies for both renewable energy resources and/or RECs;
- 20 received, reviewed and evaluated renewable project proposals totaling over 15,000
- 21 MW from the southwest United States to the Mid Atlantic states of the PJM
- 22 Interconnection. This RFP experience and expertise has resulted in AEP's
- customers in 10 of the 11 states served by its regulated Operating Companies

- having viable, reasonably priced renewable energy resources included in their
- 2 supply portfolios.
- 3 Q. WILL THE ESTABLISHMENT OF THIS RFP PROCESS PREVENT AEP
- 4 OHIO FROM PURSUING SELF-BUILD OPTIONS FOR FUTURE
- 5 **COMPLIANCE?**
- 6 A. No. All renewable energy options to meet AEP Ohio's renewable energy
- 7 benchmarks established by SB 221 will continue to be evaluated as a means of
- 8 compliance. Indeed, the GRR discussed by Company witness Nelson would address
- 9 any new capacity addition, including a renewable or advanced energy generation
- 10 facility.
- 11 Q. WHY IS AEP OHIO SEEKING TO IMPLEMENT THIS RFP APPROVAL
- 12 PROCESS FOR RENEWABLES?
- 13 A. Much like company-owned generation resources; long-term agreements provide
- price certainty for the customer as well as a known and certain revenue stream to
- the renewable energy developers which allow them to secure financing. Since these
- 16 contracts can be long-term (currently up to 20 years), AEP Ohio is seeking pre-
- approval of the entire term of a contract.
- 18 Q. PLEASE OUTLINE SOME OF THE PROCEDURES YOU PLAN TO USE
- 19 TO AID THE COMMISSION IN THEIR DECISION MAKING?
- 20 A. Accompanying each application for pre-approval of future long term contracts for
- 21 renewables the Company would propose to include the following information,
- which was described in greater detail previously in my testimony:
- 23 1. The RFP as distributed to responders

- 1 2. The responses to the RFP
- 2 3. Evaluation procedures used to analyze the bids received
- 4. The justification for selecting the winning bid
- 4 5. The resulting finalized contract (subject to Commission approval)

#### 5 Q. PLEASE EXPLAIN THE NEED FOR AN EXPEDITED APPROVAL

- 6 PROCESS.
- 7 A. As requested in Company witness Nelson's testimony, the Company is requesting
- 8 an expedited approval process of 60 days because our experience is that all bids
- 9 submitted in an RFP are valid for a finite period. Likewise, the price contained in
- the REPA that will be recommended for approval in accordance with this proposed
- process would also be valid for a finite period of time due to the potential risks of
- changes to the cost the facility or in the costs of financing in the market.

#### 13 <u>NEW SOLAR GENERATION RESOURCE FOR AEP OHIO</u>

- 14 Q. PLEASE PROVIDE AN OVERVIEW OF THE PROPOSED TURNING
- 15 **POINT SOLAR FACILITY.**
- 16 A. The Turning Point Solar Project (Turning Point) is a proposed generating facility
- that would generate electricity exclusively from sunlight. The proposed facility will
- 18 use photovoltaic panel arrays mounted on solar trackers, or other solar racking
- technology together with balance of plant components, some of which to be
- 20 manufactured in Ohio. The proposed Turning Point Solar Project will be built in
- three phases resulting in a final nameplate capacity of 49.9MW (Phase 1 20MW,
- 22 Phase 2 15MW, Phase 3 14.9MW). Turning Point would be built on
- approximately 650 acres of reclaimed coal mine land owned by OPCo and its

- affiliates at a site located in Noble County Ohio. The proposed solar generating facility would interconnect to OPCo's South Cumberland 69kV substation, subject to completion of the PJM interconnection application process.
- 4 Q. WHO IS DEVELOPING THE TURNING POINT SOLAR PROJECT AND
- 5 WHAT IS THEIR RELATIONSHIP WITH AEP OHIO?
- 6 A. AEP and Turning Point Solar LLC (a joint venture between Agile Energy, Inc. and 7 New Harvest Power, LLC) entered into a Memorandum of Understanding (MOU) 8 on October 5, 2010 wherein both parties agreed to work together on a relationship 9 which could lead to the construction of the largest solar project in Ohio. To that **10** end, the parties further agreed in the MOU to negotiate a Term Sheet outlining the 11 general terms of the proposed transaction and the relationship of the parties. On 12 January 21, 2011, the parties executed a Term Sheet (attached as Exhibit JFG-5) which outlines the general terms, conditions and structure of the proposed 13 14 transaction. During the upcoming months, the parties would expect to conduct 15 additional due diligence, continue to refine the cost estimates, and work towards the 16 execution of definitive agreements which would memorialize the project structure 17 and timing.
  - Q. WHY IS AEP OHIO PROPOSING A SOLAR GENERATION FACILITY OF
- 19 THIS MAGNITUDE?

18

A. The answer is three-fold: 1) Expanding Ohio manufacturing jobs, 2) Maximizing the benefit to AEP Ohio ratepayers of the Federal tax benefits for solar projects and, 3) Fulfilling the long-term need for Solar RECs as required to meet the solar benchmarks set forth in SB 221.

1	Ų.	PLEASE EXPLAIN IN MORE DETAIL THE MANUFACTURING JUBS
2		WHICH ARE EXPECTED TO BE FOSTERED AS A RESULT OF THE
3		PROPOSED TURNING POINT SOLAR FACILITY.
4	Α.	One of the key drivers in the Company's decision to embark on the Turning Point
5		Solar Project was that the order for 49.9 MWs of solar panels, solar trackers and / or
6		fixed racking technology and other potential sub-suppliers would be the catalyst for
7		the establishment of new, or expansion of existing manufacturing facilities in the
8		State of Ohio and the creation of approximately 300 permanent new jobs in the
9		State of Ohio. These jobs will result from one or more of the following:
10		1. The establishment or expansion of a solar panel manufacturing facility in
11		Ohio;
12		2. The establishment or expansion of a solar tracker manufacturing facility or
13		other fixed racking technology manufacturing in Ohio; and
14		3. The establishment or expansion of other Ohio based manufacturers to
15		supply the balance of plant components.
16		As discussed elsewhere in this testimony, the creation of these new manufacturing
17		jobs is a condition of the Company moving forward with the Turning Point Solar
18		Project. In addition to the manufacturing jobs, the construction activities will also
19		lead to the creation of approximately 300 temporary construction jobs associated
20		with Turning Point over the expected three-year construction period.
21	Q.	PLEASE EXPAND ON THE FEDERAL TAX BENEFITS WHICH HELP TO
22		"BUY DOWN" THE COST OF COMPLIANCE WITH THE SOLAR
23		REQUIREMENTS UNDER SB 221.

As a result of an amendment to § 48 of the Internal Revenue Code as amended by 1 2 the Energy Improvement and Extension Act of 2008 (Public Law 110-343), 3 qualified solar projects placed in service before January 1, 2017 are eligible for a 4 30% Federal Investment Tax Credit (ITC). This tax credit is given to the project's 5 owner for tax purposes. As it relates to the Turning Point project, AEP Ohio is б proposing to use this credit to "buy-down" the net cost of this solar energy to 7 ratepayers. AEP Ohio will seek a private letter ruling from the Internal Revenue 8 Service to confirm this approach. I have been advised by counsel that under IRS 9 procedures for normalization ruling requests, the request must state whether the 10 Commission has reviewed the request, whether the Commission believes the 11 request is adequate and complete and whether the taxpayer has given the 12 Commission the opportunity to participate in any conference with the IRS regarding 13 the request. As Company witness Nelson explains in his testimony, the tax benefits 14 from this approach will be used to reduce the revenue requirement by acting as an 15 offset to costs recovered in rates from customers. He further details that in addition 16 to the ITC, the project is also eligible for accelerated tax depreciation (5-year 17 MACRS) which will also result in an offset to costs recovered in rates from 18 customers, subject to adjustment of the tax basis for receipt of the ITC.

#### 19 Q. HOW WILL THE PROPOSED TURNING POINT SOLAR PROJECT

ASSIST AEP OHIO IN COMPLIANCE WITH THE SOLAR RENEWABLE

#### ENERGY BENCHMARK S ESTABLISHED BY SB 221?

20

21

A. Similar to the need for non-solar RECs, AEP Ohio also has the obligation of meeting increasing annual renewable energy benchmarks specific to solar energy.

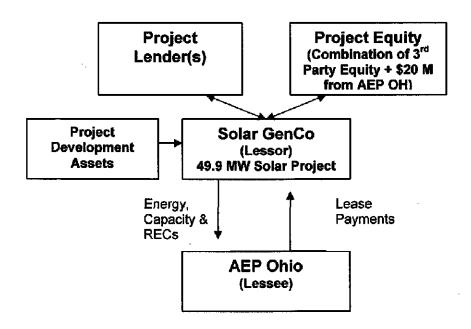
As shown in the 2010 LTFR Supplement, the solar specific portion of the renewable energy benchmarks established by SB 221 increase annually over the life of AEP Ohio's previously filed ten-year compliance plan.

The solar RECs produced by the proposed new solar generation facility will contribute to AEP Ohio continuing to meet its ongoing solar REC benchmarks as well as stimulating the Ohio economy. Due to the still developing market for Ohio solar RECs, the Company believes it is prudent to procure its renewable energy needs through options that not only meet current needs, but also bring manufacturing and construction jobs to Ohio and provide a means of future compliance with Ohio's increasing annual solar energy benchmarks. AEP Ohio's involvement in the Turning Point Solar project is to invest in, lease and operate the new solar generation facility for the benefit of its customers and the State of Ohio.

# Q. WHAT WAS THE CONCLUSION CONTAINED IN THE 2010 LTFR SUPPLEMENT?

- A. My reading of the conclusions contained on page 11 of the 2010 LTFR Supplement is that a new generation resource such as the proposed Turning Point Solar Project is consistent with fulfilling AEP Ohio's needs with regards to complying with the near-term Solar resource compliance requirements contained in SB 221.
- Q. PLEASE DESCRIBE THE STRUCTURE OF THE TURNING POINT
   SOLAR PROJECT TRANSACTIONS THAT ARE CONTEMPLATED.
- A. The parties to the transaction contemplate establishing a new company which shall be generically referred to herein as "Solar GenCo" to own the proposed solar generating facility. AEP Ohio together with Turning Point and / or other third party

equity investors would hold membership interests (equity) in the Solar GenCo. The Solar GenCo would also obtain third party project debt financing from one or more sources. Additionally, the Solar GenCo would enter into separate long-term (25-year) capital leases (Capital Lease(s)) for each of the three phases of the solar generating facility with AEP Ohio. The Capital Leases would be specifically sized to fully amortize the debt and equity provided to the Solar GenCo over the 25-year term of the Capital Lease(s). A general diagram of the proposed project structure follows:



# 9 Q. WILL AEP OHIO HAVE AN OWNERSHIP INTEREST IN THE 10 PROPOSED TURNING POINT SOLAR PROJECT?

A. Yes. As the lessee under the contemplated Capital Lease(s), AEP Ohio is effectively the facility owner. Furthermore, as a member of the proposed Solar GenCo, AEP Ohio would be making an initial equity investment in the Turning Point Solar Project in the amount of \$20 million.

- 1 Q. WHO WILL BE RESPONSIBLE FOR THE OPERATION AND
- 2 MAINTENANCE OF THE PROPOSED SOLAR GENERATION
- 3 FACILITY?
- 4 A. As the lessee under the contemplated Capital Lease, AEP Ohio will be solely
- 5 responsible for the operation and maintenance of the planned Turning Point Solar
- 6 generating facility.
- 7 Q. WHAT WOULD BE INCLUDED IN THE CAPITAL LEASE(S) FOR THE
- 8 GENERATING FACILITY BETWEEN THE GENCO AND AEP OHIO?
- 9 A. By leasing the solar generating facility from the GenCo, AEP Ohio would be
- entitled to 100% of the electrical output (MWh) from the facility, all of the facility's
- 11 capacity value in PJM, and all of the environmental attributes, including RECs,
- produced by the facility. As the Lessee under the contemplated Capital Lease(s),
- and much like a triple net lease on a building, AEP Ohio will be solely responsible
- for all costs associated with the operation and maintenance of the facility.
- Additionally, AEP Ohio would be responsible for the payment of local property
- taxes and would receive all local, state, and federal tax benefits which would serve
- 17 to reduce the revenue requirements of the Turning Point Solar Project, as also
- 18 discussed by Company witness Nelson.
- 19 Q. PLEASE EXPLAIN ANY CONTRACTUAL CONDITIONS THAT MUST BE
- 20 MET FOR AEP OHIO TO MOVE FORWARD WITH THE TURNING
- 21 **POINT SOLAR PROJECT.**
- 22 A. There are several. First, Turning Point must ensure the creation of approximately
- 23 600 (300 permanent and 300 construction) Ohio jobs. Three hundred of these jobs

will come via the establishment or expansion of manufacturing facilities in the State of Ohio from which the Solar GenCo can purchase the Project's solar panels, solar tracker systems or racking systems and/or the establishment or expansion of other Ohio based manufacturers to supply the balance of plant components. Contractors and subcontractors required to construct the Project will support an additional 300 Ohio jobs during the construction phase. The Company must also receive a favorable private letter ruling from the Internal Revenue Service with respect to certain tax matters. Furthermore, AEP Ohio must secure regulatory approval from the Ohio Commission to recover all costs associated with the facility lease(s) and any other costs associated with the Project through a nonbypassable surcharge. This surcharge would be collected through the GRR described in Company witness Nelson's testimony.

- 13 Q. ARE THERE ADDITIONAL CONDITIONS THAT MUST BE MET
- 14 BEFORE AEP OHIO WOULD AGREE TO COMMIT TO THE TURNING
- **POINT PROJECT?**

receipt of all necessary regulatory and third party approvals (including any required approval by the Federal Energy Regulatory Commission (FERC)); execution of an Interconnection Agreement with PJM, receipt of appropriate commitments for third

Yes. The closing would be conditioned on other conditions precedent including:

- 20 party financings; and completion of major contracts with costs and risks satisfactory
- 21 to AEP Ohio.
- 22 Q. WHAT DOES AEP OHIO PROPOSE TO DO WITH EXCESS RECS
- 23 PRODUCED BY THE PROPOSED TURNING POINT SOLAR PROJECT?

A. Currently the Companies have no policy regarding the banking and, more specifically, the sale of future vintage RECs (solar or non-solar) produced or purchased by the Companies that are in excess of its annual solar benchmark obligations. Solar RECs that are in excess of AEP Ohio's annual solar benchmark obligations under SB 221 can be banked for future years' compliance requirements. Since the solar benchmarks increase annually, any RECs that are "banked" in the short-run would eventually be depleted if no additional resources are added beyond the Turning Point Solar Project. Nevertheless, should AEP Ohio choose to sell some of the banked RECs any realized revenues from any such sales will be credited 100% towards reducing the total costs incurred in the Generation GRR as further discussed in Company witness Nelson's testimony.

#### Q. IF THE CONDITIONS TO CLOSE THE PROPOSED TURNING POINT

#### TRANSACTION DO NOT COME TO FRUITION, WHAT DOES AEP OHIO

#### PLAN TO DO?

A. While AEP Ohio has every expectation that a positive outcome related to the proposed Turning Point Project is achievable, the Company is prepared to move in a different direction which can also benefit the customers, the Company and the State of Ohio if definitive agreements are not executed and/or conditions to close the proposed transaction are not met. Such options include pursuing future alternative solar projects in Ohio. In doing so, the Company would seek to balance the creation or preserving Ohio manufacturing jobs created as a result of the new project while working to keep the incremental cost of compliance with the

- 1 renewable benchmarks down. The Capital Lease(s) structure articulated above
- 2 could also be used on other new generation resources as well.

#### 3 **CONCLUSIONS**

- 4 Q. IN YOUR OPINION, DOES THE TIMBER ROAD WIND REPA
- 5 DESCRIBED HEREIN PRESENT A PRUDENT, VALUABLE, AND
- 6 REASONABLY PRICED OPTION FOR AEP OHIO TO MEET ITS NON-
- 7 SOLAR ANNUAL RENEWABLE ENERGY BENCHMARKS SET BY SB
- 8 221?
- 9 A. Yes, it does.
- 10 Q. IS THE PROPOSED RFP PROCESS A REASONABLE AND PRUDENT
- 11 MEANS FOR AEP OHIO TO PROCURE COMPLIANCE PURCHASES TO
- 12 MEET ITS ANNUAL RENEWABLE ENERGY BENCHMARKS SET BY SB
- 13 **221 GOING FORWARD?**
- 14 A. Yes it is. Additionally, through this process AEP Ohio and its customers benefit
- from AEPSC's robust experience developing, issuing and administering renewable
- energy RFPs from start to finish for AEP Ohio and its affiliated Operating
- 17 Companies.
- 18 Q. IN YOUR OPINION, DOES THE PROPOSED TURNING POINT SOLAR
- 19 PROJECT DESCRIBED HEREIN PRESENT A PRUDENT, VALUABLE,
- 20 AND REASONABLY PRICED OPTION FOR AEP OHIO TO MEET ITS
- 21 SOLAR ENERGY BENCHMARKS ESTABLISHED BY SB 221?
- 22 A. It is too early in the due diligence and negotiation process to opine as to the
- prudency of this proposed project. What I can state is that it is a good strategy for

- 1 AEP Ohio to procure its renewable needs through options that not only meet current
- 2 needs and take advantage of federal tax benefits, but also assist in bringing
- 3 manufacturing jobs to Ohio and provide a means of future compliance with Ohio's
- 4 solar benchmarks.
- 5 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
- 6 A. Yes, it does.



### **American Electric Power Service Corporation**

(AEPSC)

on behalf of the seven regulated operating companies of the American Electric Power Company System

## Request for Proposals

Totaling up to approximately

1,100 MW

# of name-plate rated Renewable Energy Resources

(Southwest Power Pool and PJM Footprint)

Capable of being on-line no later than 12/31/2011

Issued

June 1, 2009

Web Address: http://www.aep.com/go/rfp/

Pre-Bid Meeting (Webinar):

PJM projects June 16, 2009 1:00 p.m. EPT

SPP projects June 18, 2009 1:00 p.m. EPT

#### Proposals Due:

2009 Projects: June 30, 2009 12:00 noon EPT (Columbus, OH) (PJM Only)
2010 Projects: August 31, 2009 12:00 noon EPT (Columbus, OH) (PJM & SPP)
2011 Projects: January 15, 2010 12:00 noon EPT (Columbus, OH) (PJM & SPP)

American Electric Power
1.100 MW Renewable Resources Solicitation

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	newable Energy Purchase Agreement (REPA)	

#### 1. Intorduction

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 its seven utility subsidiaries. AEPSC is requesting bids which will result in obtaining up to approximately 1,100 MW of nameplate Renewable Energy Resources that have a placed-in-service date of January 1, 2008 or after, which are or will be interconnected to the PJM Interconnection (PJM) or the Southwest Power Pool (SPP) and are capable of being operational no later than December 31, 2011.

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

#### **Issue RFP**

Mon. June 1, 2009

#### Pre-Bid Meeting (Webinar)

Projects interconnected to PJM Projects interconnected to SPP

Tues. June 16, 2009 1:00 p.m. EPT Thurs. June 18, 2009 1:00 p.m. EPT

#### **Proposal Due Dates**

#### (PJM ONLY)

Projects expected on-line by 12/31/09 Tues. June 30, 2009 12:00 noon. EPT

#### (SPP & PJM)

Projects expected on-line by 12/31/10 Mon. Aug. 31, 2009 12:00 noon. EPT Projects expected on-line by 12/31/11 Fri. Jan. 15, 2010 12:00 noon. EPT

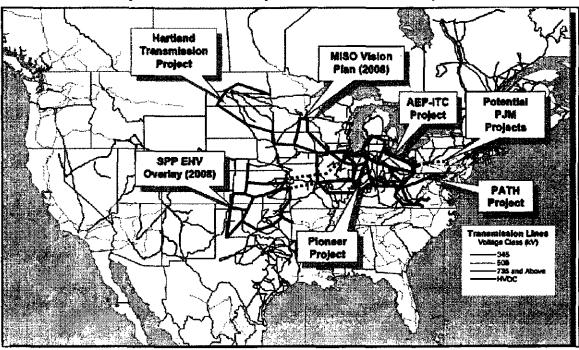
1.2 American Electric Power is one of the largest electric utilities in the United States, delivering electricity to more than 5.2 million customers in 11 states. AEP ranks among the nation's largest generators of electricity, owning nearly 38,000 megawatts of generating capacity in the U.S.

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 some of which are highlighted in the map below:

Eastern U.S. - Potential 765 kV Plans Under Development

The lines shown are conceptual in nature and do not represent actual routes. Plans are subject to change.

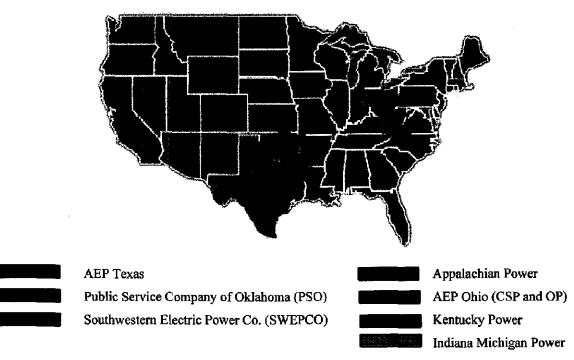


Source: http://www.aep.com/investors/present/documents/CreditSuisse Feb-3-2009.pdf

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: <a href="http://www.aep.com/about/i765project/docs/WindTransmissionVisionWhitePaper.pdf">http://www.aep.com/about/i765project/docs/WindTransmissionVisionWhitePaper.pdf</a>

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**



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

#### 1.3 AEP Utility Subsidiary Credit Ratings as of May 2009

AEP Utility Subsidiary Credit Ratings					
	Senior	Senior Unsecured			
Company	Moody's	S&P	Fitch		
Appalachian Power Company	Baa2	BBB	BBB+		
Columbus Southern Power Company	A3	BBB	A-		
Indiana Michigan Power Company	Baa2	BBB	BBB		
Kentucky Power Company	Baa2	BBB	BBB		
Ohio Power Company	A3	BBB	BBB+		
Public Service Company of Oklahoma	Baal	BBB	BBB+		
Southwestern Electric Power Company	Baal	BBB	BBB+		

#### 1.4 **AEP Wind Experience:**

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

	10.6		e .		ng katawa Sar.	i ingger	ing a subparació
<sup>P</sup> roject	State	<u>RTO</u>	MY	Online	Developet / Ovner	Turbine Mg.	Officaker Augustus
Soutwest Mesa	1%	EMCOT	75.0	41	NewStafFPL)	Œ	Partners
South Treet	TX	ERCOT	102	2008	Babcook & Brown	Siemene	AEP Energy Partners
Desent Sky	TX	ERCOT	180.5	2091	AEP Energy Partners (Duner)	GEE STEELS	City Public Services of San Antonio
Trent Mesa	TX	ERCOT	<b>17 (50)</b>	2001	AEP Energy Partners (Owner)		<u> Luminant</u>
Total NWs D		_		•			
Contract (No.	4- <i>50 g til</i> 2	(ed)	487.5	Bara nguya yaki ilikuwa Mu	Herriconse do los Sensos do Company	st to a sanda yanga gaga.	Processing Commencer
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			A STATE OF THE PARTY OF THE PAR	Online			1990 P. C. L.
Project	State	RTO	MY	[expected]	Developer	Turbine Mfg.	AEP Offtaker Public Service
Weatherford	OK	SPP	147.0	2005	NextEra (FPL)	GE	Company of Public Service
Blue Cangon II	OK	SPP	151.2	2005	Horizon Wind Energy	Vestas	Company of Public Service
Gleeping Bear	OK	SPP	94.5	2008	Edison Mission	Suzion	Company of
Camp Grove	<u> </u>	PJM	75	1709	Orion Energy Partners	GE	Appalachian Power Company
Fowler 1	IN	PJM	100	1/03	BP / Dominion	Clipper/Vestas	
Majestic	ТX	SPP	79.5	1/03	Babcock & Brown	GE	Southwestern Electric Power
Fowler III	IN	РЈМ	100	2/03	BP Wind Energy	Clipper/Vestas	Appalachian Power Company
Beech Flidge	WV.	MLS	100.5	(12709)	Invenergy LLC	GE -	Appalachian Power Company
EIX CRA	ОК	SPP	98.9	(12/09)	NestEra(FPL)	Siemens	Public Service Company of
Blue Cangon V	OK	SPP	86	(12/09)	Horizon VInd Energy	CE	Public Service Company of
Grand Ridge II		PJM	51	(12/09)	Invenergy LLC	<b>ar</b>	Appalachian Power Company
Grand Ridge II		PJM	49.5	(12/09)	Inveneral LLC		Appalachian Pover Company
(x)gababbas				ne e e Africa			Utio Pover
Fowler II	IN .	PJM	- 60	(12/09)	BP Vind Energy		Company Columbus Southers
Fowler II	IN.	PJM	50	(12/08)	BP Vind Energy	GRE	Power Indiana Michigan
Forter it Total MVs U	N nder Co	PJM	50	<u>(12/08)</u> -	BP Vind Energy 308	GE	Pover Company
(Regulated)	wr co	,,, <u>au</u> 4	1296.1				
					Online		

#### 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 2009 Corporate Sustainability Report (<a href="http://www.aep.com/citizenship/crreport/">http://www.aep.com/citizenship/crreport/</a>). 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 1,100 MW of nameplate rated Renewable Energy Resources that have a placed-in-service date of January 1, 2008 or after, which are or will be interconnected to PJM or SPP and capable of being operational by December 31, 2011. AEPSC expects to contract for the output of Renewable Energy Resources acquired pursuant to this RFP by means of multiple 20-year, long term power purchase agreements.

- 2.2.1 <u>Renewable Energy Resources</u>: means commercially proven technologies for the production of electric energy. Generation technologies eligible to bid into this RFP include:
  - Biologically derived methane gas
  - Biomass energy, including non-treated woody waste from pulping or wood manufacturing process
  - Geothermal energy
  - Hydroelectric energy as certified by the Low Impact Hydro Institute
  - Wind energy

- Solar (Commercial scale, sited and interconnected to PJM only, subject to same evaluation criteria as non-solar renewable bids)
- 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; and a minimum nameplate rating of 5 MW for Hydroelectric energy, Landfill gas and Solar (commercial scale).
- 2.2.3 Project Expected on-line date: Project bids will be submitted on the due date provided in Section 3 in accordance with the year in which the project is expected to reach commercial operation. For avoidance of doubt, 2009 Projects (PJM Only) are projects expected to be online on or about December 31, 2009; 2010 Projects (PJM and SPP) are projects expected to be on-line after January 1, 2010 and on or about December 31, 2010; 2011 Projects (PJM and SPP) are projects expected to be on-line after January 1, 2011 and on or about December 31, 2011.

#### 2.2.4 Bid Price Structure:

A. <u>Bundled Renewable Energy Price</u>: 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 below 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 for PJM projects and \$42/MWh for SPP Projects. 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; <a href="www.pjm.com">www.pjm.com</a> or within the Southwest Power Pool (SPP) territory <a href="http://www.spp.org/">http://www.spp.org/</a>.

#### **Example PJM Bid Price Structure:**

#### 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

#### <u>Time of Day Definition (all times Eastern Prevailing Time (EPT)):</u>

- 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

#### **Example SPP Bid Price Structure:**

#### 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	\$42.00 / MWh	Nights, Weekends & NERC Holidays: Jan - Dec

#### Time of Day Definition (all times Central Prevailing Time (CPT)):

- Premium Peak Defined as Monday through Friday, hour ending 7-22, for the months January, February, July, August and December (excluding NERC Holidays).
- Peak Defined as Monday through Friday, hour ending 7-22, for the months March,
   April, May, June, September, October and November (excluding NERC Holidays).

Off Peak - Defined as Monday through Friday, hour ending 1-6 and 23-24;
 Saturday, Sunday and NERC Holidays, hour ending 1-24.

For NERC Holidays see: http://www.nerc.com/~filez/offpeaks.html

CPT or Central Prevailing Time and is only used in this document to reference the Time of Day Pricing in accordance with the time zone used by SPP.

- 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. All Renewable Energy 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.
- 2.2.4. <u>All in Price</u>: 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): <a href="http://www.pjm.com/index.jsp">http://www.pjm.com/index.jsp</a> or Southwest Power Pool (SPP) <a href="http://www.spp.org">http://www.spp.org</a>.
- 2.2.5. <u>Delivery and Location</u>: This RFP requests proposals from Renewable Energy Resources in which the interconnection point will be the PJM or SPP bus to which the generator is electrically connected. Information submitted to this RFP must include identification of proposed transmission and proposed interconnection points, identifying the transmission provider, the control area and the PJM or SPP queue number.

2.2.6. <u>Associated Attributes</u>: For purposes of this solicitation, the sale of renewable energy to AEPSC 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.

1,100 MW Renewable Resources Solicitation

#### 3. RFP Schedule and Procedure

- 3.1. <u>Schedule</u>: 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 webinar as follows:

Pre-Bid Meeting (Webinar)	Date/Time
Projects interconnected to PJM	Tues. June 16, 2009 1:00 p.m. EPT
Projects interconnected to SPP	Thurs. June 18, 2009 1:00 p.m. EPT

**Webinar:** information to be provided on RFP website: www.aepsc.com/go/rfp

During the Webinar, 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's website at the web address listed above.

Date	Time
June 1, 2009	
June 16, 2009 / June 18,2009	1:00 pm EPT
21 days prior to bid due date	5:00 pm EPT
14 days prior to bid due date	5:00 pm EPT
See below	12:00 noon EPT
45 days after bid due date	
	June 1, 2009  June 16, 2009 / June 18,2009  21 days prior to bid due date  14 days prior to bid due date  See below

#### 3.2 Proposals Due Dates and Qualifying Region

#### PJM only:

"2009 Projects" expected on-line by 12/31/09 Tues. June 30, 2009 12:00 noon EPT

#### PJM and SPP:

"2010 Projects" expected on-line by 12/31/10 Mon. Aug. 31, 2009 12:00 noon EPT

"2011 Projects" expected on-line by 12/31/11 Fri. Jan. 15, 2010 12:00 noon EPT

#### 3.3 Submittal of Proposals

One (1) original (hardcopy) copy bound of all project proposals, including one (1) full electronic copy of the project proposal on CD which includes 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

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.

#### 3.4 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.

#### 3.5 Affiliate Bidding Policy

Neither AEPSC, 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.

#### 3.6 <u>Information Policy</u>

For information regarding this RFP visit: <a href="http://www.aep.com/go/rfp/">http://www.aep.com/go/rfp/</a>
AEPSC has established this information policy so that all bidders have access to the same information about the bidding process.

- 3.6.1 Restricted Access: A portion of the RFP website will be password protected which will require the Bidder to fill in information regarding the proposed project including a PJM or SPP Interconnection queue number. The restricted access area will include:
  - 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 <u>Timely Submission of Bids</u>

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 for at least sixty (60) days after the Proposal Due Date, upon which time proposals shall expire unless the bidder has been notified and selected as a final award recipient.

#### 5.4 Projects Interconnected 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 and follow the PJM process to obtain generation interconnection. Cost for electrical interconnection and upgrades are the bidder's responsibility.
  - 5.4.2.1 Projects expected to be online in 2009 or 2010 need to have completed a PJM System Impact study and must submit such study with proposal.

- 5.4.2.2 Projects expected to be on-line in 2011 that are further along in the PJM interconnection process will be viewed more favorably.
- 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. The cost of this analysis, if any, will be borne by AEPSC.
- 5.4.4 Owners of PJM projects will need to be members of PJM prior to the flow of energy from the project in order to transfer any associated capacity credit upon commercial operation of the facility. AEPSC will need to receive notification from an officer certifying that the owner of the facility is a PJM member. Additional information regarding PJM membership can be viewed at: http://www.pjm.com/about-pjm/member-services/become-a-member/membership-assistant.aspx?p=1

#### 5.5 Projects Interconnected to SPP Transmission System

- 5.5.1 The interconnection point will be the SPP bus to which the generator is electrically connected or the closest thereto monitored or Locational Imbalance Pricing (LIP) by SPP.
- 5.5.2 Bidders will be required to submit generation interconnection applications to SPP and follow the SPP process to obtain generation interconnection. Cost for electrical interconnection and upgrades are the bidder's responsibility.
  - 5.5.2.1 Projects expected to be online in 2010 need to have competed at least the SPP System Impact Study and Projects expected to be online in

2011 need to have completed at least a SPP Feasibility study which must be submitted with proposal.

- 5.5.2.2 Bids selected to the short-list will be screened for the cost to deliver energy and capacity from the Point of Delivery to AEP West load. These costs will be determined via SPP's Aggregate System Impact Study process. One or more short-listed projects may be submitted to the SPP Aggregate Study System Impact Study in order to evaluate the additional costs of obtaining firm transmission (Network Service) associated with the Bidder's Project. The cost of this analysis will be borne by the Purchaser.
- 5.5.3 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 (LIP) delivered from AEP's balancing authority in SPP. The cost of this analysis, if any, will be borne by AEPSC.

#### 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 <u>Clarification of Proposals</u>

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. 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 <u>table of contents</u> and provide concise and complete information on all of the following topics:

#### 6.1 Executive Summary

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

#### 6.2 **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)

#### 6.3 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)

#### 6.4 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)

#### 6.5 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)

#### 6.6 Exceptions to REPA /Term Sheet

#### 6.6.1 Exceptions to REPA (Wind/Hyro/Solar)

A form REPA for Renewable Energy Resources is attached with this RFP (available to Registered Bidders in accordance with Section 3.5.1), 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.

#### 6.6.2 Term Sheet (Biomass/Landfill)

A Term Sheet must be provided with REPA Exceptions for Biomass specifically to capture subjects such as fuel that are not specifically contemplated in the form REPA. The Term Sheet is expected to be conceptual.

#### 6.6.3 Right of First Offer ("RoFO")

The executed agreement is expected to contemplate the inclusion of a Right of First Offer ("RoFO") which specifies, in addition to other terms and conditions that the Purchaser may purchase the facility if and when the facility owner is interested in selling the facility to a third party during the term of the PPA. While not required under the REPA/Term Sheet, respondents, at their option, may offer an end-of-term or other purchase option that specifies that the facility (or the stock of the facility owner) can be purchased for its appraised fair market value at a specified time or times during, or at the end of, the term of the agreement.

#### 6.7 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:

6.7.1 <u>Size</u> – Proposals must provide the project acreage and nameplate rating (Appendix B)

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

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 SOx, NOx, 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.

# B. <u>Hydroelectric Facility as certified by The Low-Impact Hydro</u> 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.

#### C. 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.

# D. <u>Solar (Commercial Scale, sited and interconnected to PJM only, subject to same evaluation criteria as non-solar renewable bids)</u>

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.

#### E. 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)
- 6.7.2 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, if applicable, was measured. This profile only needs to be included on the CD copy of the bid proposal.
- 6.7.3 <u>Location</u> 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.
- 6.7.4 <u>Project Layout</u> Proposals must show anticipated placement of turbines and other project facilities, including transmission layouts and the Point of Delivery. (Appendix B)
- 6.7.5 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 (if

- applicable), availability, production etc.) to the power purchaser. (Appendix B)
- 6.7.6 <u>Interconnection</u> Proposals must include copies of all studies prepared or required by PJM or SPP.
- 6.7.7 <u>Project and Construction Schedule</u> Schedules must include major milestones such as completion of permitting, financing, regulatory requirements, major construction, testing, Commercial Operation Date, etc.
- 6.7.8 <u>Financing Plan</u> 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.

#### 7. 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.

- 7.1 Proposals must include all applicable content requirements described in Section 6, including all requested information and completed forms.
- 7.2 Proposals must offer documentation that shows an acceptable level of development, credit, and technology risk, as determined by AEPSC's bid evaluation team.
- 7.3 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.

#### 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 Projects meeting the minimum threshold requirements will be analyzed further.

  The non-price factors described below will be used to further analyze the viability of the proposed project. The proposals will then be ranked according to price.
  - 8.3.1 Price Factors: Price factors will be weighted approximately 80% 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 AEPSC and their customers.

- 8.3.2 <u>Non-Price Factors:</u> The non-price factors will be weighted approximately 20%, 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. <u>Location</u> The location of the project relative to AEP's service territory. Order of preference:
    - a. AEP transmission lines
    - b. AEP State not on AEP transmission lines
  - B. <u>Developer experience</u> 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. <u>Proposed date of Commercial Operation</u> To help ensure maximum benefits to AEP's customers, AEPSC prefers proposals that provide substantial assurances that the project will be on-line no later than in accordance with the Proposal Due Dates outlined in Section 3.
  - D. <u>Time and feasibility</u> 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. <u>Creditworthiness</u> 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. <u>Proximity and availability of transmission</u> 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. <u>Property and site control</u> AEPSC would prefer bids that demonstrate a high level of site control through executed land leases/easements.
- H. <u>Project capacity</u> All proposals must offer the minimum sizes as set forth in 2.2.2.
- I. <u>Proven generation technology</u> AEPSC will evaluate proposed technology and the commercial terms of the generation equipment supply agreement.
- J. <u>Probability of financing</u> 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. In addition, please fully explain if the proforma assumes the use of the PTC, ITC or any other available incentives or subsidies.
- K. <u>Confidence in long-term energy projections</u> 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.

- L. <u>Exceptions to REPA/Term Sheet</u> ~ 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.
- M. <u>Regulatory Considerations</u> 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 the bidder or bidders whose proposal is or are selected for further discussions at the completion of the bid evaluation process. AEPSC may request additional information regarding factors that may impact the total cost or schedule of the project to 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 any of AEP's seven regulated affiliates associated with this RFP are 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 AEPSC 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 AEPSC 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.

# Appendix A

### **Expression of Interest Form**

Email to: pisimmon	s@aep.com
Due: In accordance v	with RFP schedule
Note that completion	of all information is required.
This response is an	indication of our interest in the AEPSC Request for nameplate
renewable energy fa	cilities capable of being operational by December 31, 2010. This
response also establ	ishes 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:	
Interconnected to	SPP PJM
Resource type:	Wind energySolar  Hydroelectric facilityGeothermalBiomass  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
Bidder does venture or of is for power with AEP, or	ates Certification not have an affiliate relationship (whether by ownership, joint her association) with AEP or any AEP affiliate; and the proposed bid generated by facilities that are not owned by, or otherwise associated any AEP affiliate  Signature and Date
r Marionizadi D	ignature and rate

## Appendix B-1

### **Bid Summary**

Project Name			_		
Unique Bid Nam	ie	· · · · · · · · · · · · · · · · · · ·			
Estimated Comm	nercial Operation Date (	(mm/dd/yy	/)	_	
Name Plate (MW	7)				
Expected Annua	l Availability (%):				
Expected Annual	l Production (MWh)				
Have turbines/eq	uipment for this projec	t been seci	ured, purc	hased	1?
Site Information	<u>n</u> :				
Site Address/Leg	gal Description				
	Location: Longitude: _				
County:	City:		State:		Zip:
Site Control:	Already Own Site				
	Site Purchase Pendi	ng			
	Currently lease site	% (acres	) leased		
Is there potential	for expansion? Y	N			
What is possible	additional acreage avai	ilable?	<u>_</u>		
Please attach a	a copy of all leases	, easeme	nts or o	ther	ownership
documentation.					
Transmission In	iterconnection:				
Point of Delivery:					
Point of Interconn	ection with, [Insert Utilit	y]			-
County:	City:	State: _	Zip	):	_
Substation Name:					
Interconnection V	oltage:				

# Appendix B-2

Has a PJM or SPP feasibility study been performed for the proposed project?
YN
Please attach a copy of all PJM or SPP interconnection studies and / or the
expected completion date.
PJM or SPP 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 YN
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 8	760 calendar	year <u>net</u>	hourly	forecast	and	address	an
extrapolations used.							
Consulting meteorol	logist informa	tion					
Name:					_		
Address:							
Contact Number:					_		
Please attach the resu	me of this con	sulting me	teorolog	ist.			

# Appendix B-4

Bid Summary (Solar)

Project Name			
	ne		
Estimated Comn	nercial Operation Date (mu	n/dd/yy)	<del></del>
Name Plate (MV	V <sub>AC</sub> ) Expected (	Capacity Facto	or: (%);
Expected Annua	l Production (MWh)	Annual	Degradation (%)
Thin Film (Y/N)	Fixed Panel or	Tracking Syst	tem
Panel Manufactu	ırer		
Have solar panel	s for this project been secu	ıred, purchase	ed (Y/N)
Site Information	<u>n</u> :		
Site Address/Leg	gal Description		
Site Geographic	Location: Longitude:		Longitude:
County:	City;	State:	Zip:
Site Control:	Already Own Site		
_	Site Purchase Pending	g	
	Currently lease site	% (acres) leas	ed
Is there potential	for expansion? Y N		
What is possible	additional acreage availab	ole?	
Please attach a c	opy of all leases, easement	ts or other own	nership documentation.
TO 4 1 15 10 10 10 10 10 10 10 10 10 10 10 10 10			
Distribution Int	<del></del>		
Point of Deliver			
	nnection with, [Insert Utilit		
	City:		Zip:
	e:		
Interconnection	Voltage:		

### Appendix C-1

### PJM Interconnected Facility

#### **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

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 for further details on price escalation beginning in 2012 of 2.25% per year.

**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 60 days after Proposal Due Date

### Appendix C -2

### **SPP Interconnected Facility**

#### **Bid Price Input Sheet**

(For alternative bid pricing submit a separate sheet)

#### 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	\$ 42.00 / MWh	Nights, Weekends & NERC Holidays: Jan – Dec

Insert a Bid Price for each time period. Premium Peak is 120% of the Peak Bid and Off-Peak is set a \$42.00/MWh. For alternative bid pricing please include a separate sheet following the same format labeled "Alternative Bid Price Input Sheet". See2 B for further details on price escalation beginning in 2012 of 2.25% per year.

**Premium Peak** – Defined as Monday through Friday, hour ending 7-22, for the months January, February, July, August and December (excluding NERC Holidays).

**Peak** – Defined as Monday through Friday, hour ending 7-22, for the months March, April, May, June, September, October and November (excluding NERC Holidays).

Off Peak – Defined as Monday through Friday, hour ending 1-6 and 23-24; Saturday, Sunday and NERC Holidays, hour ending 1-24.

These prices will be binding through 60 days after Proposal Due Date

## Appendix C -3

### **Energy Input Sheet**

(See attached Excel spreadsheet)

# Appendix D Mutual Confidentiality Agreement

.com

Attn: Peggy Simmons

American Electric Power Service Corporation

155 West Nationwide Boulevard

Suite 500

Columbus, OH 43215

Fax: (614) 583-1611

Due:

5:00 p.m. EPT

This Mutual Confidentiality Agreement ("Agreement") dated as of \_\_\_\_\_\_\_,

2009 ("Effective Date") is made and entered into by and between American Electric Power

Service Corporation ("AEPSC"), as agent for [ ], 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:
  - 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.
- 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  [ ]	BIDDER: insert full legal name
Ву:	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 1	st Bidder'	S	Affiliate	companies	s:
--	----------	------------	---	-----------	-----------	----

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/

# COLUMBUS SOUTHERN POWER COMPANY & OHIO POWER COMPANY RENEWABLE ENERGY PURCHASE AGREEMENTS ("REPAs") WITH PAULDING WIND FARM II, LLC

#### SUMMARY TERM SHEET

Paulding Wind Farm II, LLC entered into an agreement with Columbus Southern Power Company (the "CSP REPA") for 45% of the aggregate 99 MW nameplate output of its Timber Road Facility being constructed in Paulding County, Illinois. Simultaneously, Paulding Wind Farm II, LLC entered into an agreement with Ohio Power Company (the "OP REPA", and collectively with the CSP REPA, the "REPAs") for the remaining 55% of the aggregate 99 MW nameplate output of the Timber Road Facility. The terms, conditions and pricing provisions of the REPAs are summarized below.

This Summary Term Sheet is qualified in its entirety by reference to, and in no way alters, the actual terms and conditions of the REPAs. Except as otherwise indicated by the context, capitalized terms used in this Summary Term Sheet have the meanings set forth in the REPAs.

- Seller. Paulding Wind Farm II, LLC.
- <u>Purchaser</u>. In the case of the CSP REPA, Columbus Southern Power Company, and in the case of the OP REPA, Ohio Power Company.
- Term. 20 years after the day before the first day of the Delivery Period.
- Price. Each Purchaser will pay Seller the Contract Rate set forth in Exhibit A attached hereto for each MWh of Renewable Energy delivered under the REPAs for the calendar year 2012. This price will then increase 2.25% per year in 2013 and thereafter. Each Purchaser will also reimburse Seller for any operating reserve or other PJM charges associated with scheduling the Renewable Energy to each Purchaser via PJM's eSchedule process.
- Delivery Period. The REPAs will be effective as of the date of their execution. Each Purchaser's obligation to purchase Purchaser's Share (as defined below) of all Renewable Energy Products (as defined below) will begin on the following applicable date: (i) if such Purchaser fails to file its first request for a final, non-appealable order from the Public Utilities Commission of Ohio (the "Commission") approving the terms and conditions of the applicable REPA and authorizing such Purchaser to recover all of the jurisdictional costs associated with such REPA through Ohio retail rates with the Commission (the "First Request") by March 1, 2011, as such date may be extended by the Commission (the "2012 SSO Application Deadline"), the latest of (a) the first day of the month following the month in which the 2012 SSO Application Deadline occurs, (b) the first day of the month following the month in which the COD occurs, and (c)

January 1, 2012; and (ii) if such Purchaser files its First Request by the 2012 SSO Application Deadline, the later of (a) the first day of the month following the month is which a final, non-appealable order from the Commission approving the terms and conditions of the applicable REPA and authorizing such Purchaser to recover all of the jurisdictional costs associated with such REPA through Ohio retail rates (a "Cost Recovery Order") becomes effective, (b) the first day of the month following the month in which the COD occurs, and (c) January 1, 2012.

- <u>Delay Damages</u>. Customary for transactions of this type.
- <u>Termination Rights of Seller Prior to Commencement of Delivery Period.</u> None.
- Termination Rights of Purchasers Prior to Commencement of Delivery Period. If a Purchaser files a timely First Request on or before the 2012 SSO Deadline, but such Purchaser is unable to obtain a Cost Recovery Order by December 31, 2012, such Purchaser may, by notice to Seller on or prior to December 31, 2012, terminate the applicable REPA. If a Purchaser files a stand-alone request for a Cost Recovery Order (a "Cost Recovery Request") but such Purchaser is unable to obtain a Cost Recovery Order on or before the earlier of (i) 180 days from the filing of such Cost Recovery Request or (ii) December 31, 2012, then such Purchaser may, by notice to Seller within 90 days of such earlier date, terminate the applicable REPA

- <u>Representations and Warranties</u>. Customary for transactions of this type.
- Sale and Purchase of Renewable Energy Products. During the Delivery Period under each REPA, Selier will generate, deliver and sell to each Purchaser, such Purchaser's Contract Capacity Share (with respect to the CSP REPA, 45% of Facility Capacity and, with respect to the OP REPA, 55% of Facility Capacity) of all Renewable Energy generated by the Timber Road Facility (as applicable, "Purchaser's Share"), together with all associated Capacity, Beneficial Environmental Interests and Ancillary Service (collectively, "Renewable Energy Products").
- Purchaser's Right to Curtail Renewable Energy. Each Purchaser has the right from time to time to invoke an Economic Curtailment or, upon receipt of notice thereof, a Reliability Curtailment that is directed by the Transmission Operator or Interconnection Provider. In case of Economic Curtailment, each Purchaser must provide Seller with notice of the curtailment and such Purchaser's Share of Renewable Energy will be reduced to zero (0). In case of Reliability Curtailment, each Purchaser must provide Seller with notice of the curtailment and the amount

- of Renewable Energy, if any, that may continue to be delivered to such Purchaser during such Reliability Curtailment.
- Compensation for Curtailments. Each Purchaser is required to compensate Seller for any periods of Economic Curtailment, based on the amount of energy that Seller would have delivered given the prevailing wind conditions and other factors during the curtailment period. No compensation is owed during periods of Reliability Curtailment.
- Operation. Seller will operate the Facility consistent with Good Utility Practices, including compliance with permits and laws, and the Contract Administration Procedures developed with each Purchaser.
- <u>Delivery</u>. Seller is responsible for all costs required to deliver each Purchaser's Share of Renewable Energy from the Facility to the Point of Delivery. Each Purchaser is responsible for all costs required to receive such Purchaser's Share of Renewable Energy at the Point of Delivery and deliver such energy to points beyond the Point of Delivery.
- Scheduling Arrangements. Seller is responsible for all scheduling of the Renewable Energy via PJM's eSchedule system. Each Purchaser is responsible for (1) all costs related to delivery of such Purchaser's Share of Renewable Energy at and from the Point of Delivery and (2) for all scheduling, imbalance and congestion costs that are associated with such Purchaser's Share, excluding any such costs arising from the failure by Seller to curtail deliveries in connection with a Reliability Curtailment or Economic Curtailment. Seller is responsible (1) for all costs related to delivery or the Renewable Energy to the Point of Delivery and (2) for all scheduling, imbalance and congestion or other costs incurred by each Purchaser as a result of the failure by Seller to curtail deliveries in connection with a Reliability Curtailment or Economic Curtailment.
- Beneficial Environmental Interest Certification. Seller is responsible for subscribing to and providing reports to the Generation Attribute Tracking System (GATS) and delivering GATS Certificates associated with the Renewable Energy delivered to each Purchaser.
- <u>Interconnection Facilities</u>. Seller has entered into a separate and free-standing Interconnection Agreement with the Interconnection Provider and is responsible for constructing, operating and maintaining all interconnection facilities thereunder.
- Meters. Customary for transactions of this type.
- <u>Taxes and Tax Credits</u>. Seller is solely responsible for all taxes relating the Facility, and for taxes incurred by reason of the sale and delivery of Renewable Energy to each Purchaser at the Point of Delivery. Each Purchaser is responsible

for all taxes relating to the Renewable Energy Products, and for taxes associated with the Renewable Energy upon and after the receipt at the Point of Delivery. Seller will receive all tax credits from the ownership and operation of the Facility.

- Events of Default of Seller. Customary for transactions of this type.
- Events of Default of Purchaser. Customary for transactions of this type.
- Remedies for Default. Customary for transactions of this type including a termination right in the event a Default remains uncured beyond the applicable period(s).
- <u>Seller Security Fund</u>. Seller will provide a Security Fund as credit support for damages due upon Seller's failure to achieve COD by the Commercial Operation Milestone, damages due upon Seller's failure to generate, sell and deliver a minimum amount of Committed Renewable Energy during an applicable period, or damages resulting from a Seller Event of Default.
- <u>Damages Payable in the Event of Termination</u>. Customary for transactions of this type.
- <u>Indemnification</u>. Customary for transactions of this type.
- Fines. Customary for transactions of this type.
- <u>Limitation of Liability, Remedies and Damages</u>. Customary for transactions of this type.
- <u>Assignment</u>. Customary for transactions of this type.
- Right of First Offer. If Seller desires to sell its interest in the Facility (or the
  equity interests of Seller), Seller must first offer such interest (or interests) to each
  Purchaser (based on such Purchaser's Share) at the price and terms desired by
  Seller.
- <u>Confidentiality</u>. Customary for transactions of this type.
- Governing Law/Venue. The interpretation and performance of the REPA is governed under the laws of the State of New York.
- <u>Dispute Resolution</u>. Customary for transactions of this type.

## EXHIBIT A

#### ADDITIONAL TERMS

#### **PRICING**

#### CONTRACT RATE

(\$ per MWh)

"Around the Clock" Price



\* Above price escalated at 2.25% per year beginning 1/1/2013

#### RENEWABLE ENERGY PURCHASE AGREEMENT FOR WIND ENERGY RESOURCES

BETWEEN

PAULDING WIND FARM II, LLC

AND

**OHIO POWER COMPANY** 

November <u>12</u>, 2010

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# RENEWABLE ENERGY PURCHASE AGREEMENT BETWEEN PAULDING WIND FARM II, LLC AND OHIO POWER COMPANY

This Renewable Energy Purchase Agreement (the "REPA") is made this <u>12</u> day of November, 2010, by and between Paulding Wind Farm II, LLC ("Seller"), a Delaware limited liability company, with a principal place of business at c/o Horizon Wind Energy LLC, 808 Travis, Suite 700, Houston, Texas 77002, and Ohio Power Company ("Purchaser"), an Ohio corporation, with a principal place of business at c/o American Electric Power Service Corporation, 1 Riverside Plaza, Columbus, Ohio 43215-2355. Seller and Purchaser are hereinafter referred to individually as a "Party" and collectively as the "Parties".

#### INTRODUCTION

WHEREAS Seller desires to develop, design, construct, own or lease and operate a renewable electric generating facility with an expected total name plate capacity of approximately 99 MW, and which is further defined below as the "Facility"; and

WHEREAS Seller intends to locate the Facility at Paulding County, Ohio, and to interconnect the Facility with the Transmission Provider's System; and

 WHEREAS Seller desires to sell and deliver to Purchaser at the Point of Delivery Purchaser's Contract Capacity Share of the Renewable Energy Products, and Purchaser desires to buy the same from Seller, subject to the satisfaction of certain conditions precedent;

WHEREAS Purchaser has accepted Seller's offer to sell such Renewable Energy Products in accordance with the terms and conditions set forth in this REPA, subject to the satisfaction of certain conditions precedent;

WHEREAS, simultaneously with the execution and delivery of this REPA, Columbus Southern Power Company (the "Second Counterparty") and Seller are executing and delivering a second Renewable Energy Purchase Agreement (the "Second Agreement") for the remaining 45% of the Facility Capacity; and



NOW THEREFORE, in consideration of the mutual covenants herein contained, the sufficiency and adequacy of which are hereby acknowledged, the Parties agree to the following:

# ARTICLE 1 DEFINITIONS AND RULES OF INTERPRETATION

#### 1.1 Rules of Construction.

The capitalized terms listed in this Article shall have the meanings set forth herein whenever the terms appear in this REPA, whether in the singular or the plural or in the present or past tense. Other terms used in this REPA but not listed in this Article shall have meanings as commonly used in the English language and, where applicable, in Good Utility Practice. Words not otherwise defined herein that have well known and generally accepted technical or trade meanings are used herein in accordance with such recognized meanings. In addition, the following rules of interpretation shall apply:

- (A) The masculine shall include the feminine and neuter.
- (B) References to "Articles," "Sections," or "Exhibits" shall be to articles, sections, or exhibits of this REPA.
- (C) The Exhibits attached hereto are incorporated in and are intended to be a part of this REPA; provided, that in the event of a conflict between the terms of any Exhibit and the terms of Articles 1 through 20 of this REPA, the terms of Articles 1 through 20 of this REPA shall take precedence.
- (D) This REPA was negotiated and prepared by both Parties with the advice and participation of counsel. The Parties have agreed to the wording of this REPA and none of the provisions hereof shall be construed against one Party on the ground that such Party is the author of this REPA or any part hereof.
- (E) The Parties shall act reasonably and in accordance with the principles of good faith and fair dealing in the performance of this REPA. Unless expressly provided otherwise in this REPA, (i) where the REPA requires the consent, approval, or similar action by a Party, such consent, approval or similar action shall not be unreasonably withheld, conditioned or delayed, and (ii) wherever the REPA gives a Party a right to determine, require, specify or take similar action with respect to a matter, such determination, requirement, specification or similar action shall be reasonable.
- (F) Each reference in this REPA to any agreement or document (including those set forth electronically on an internet web site) or a portion or provision thereof shall be construed as a reference to the relevant agreement or document as amended, supplemented or otherwise modified from time to time.
- (G) Each reference in this REPA to applicable laws and to terms defined in, and other provisions of, applicable laws (including those set forth

electronically on an internet web site) shall be references to the same (or a successor to the same) as amended, supplemented or otherwise modified from time to time.

- (H) Each reference in this REPA to a Person includes its successors and permitted assigns and, in the case of a Governmental Authority, any Person or Persons succeeding, in whole or in part, to its functions and capacities.
- (I) In this REPA, the words "include," "includes" and "including" are to be construed as being at all times followed by the words "without limitation."

#### 12 <u>Interpretation with Interconnection Agreement.</u>

The Parties recognize that Seller will enter into a separate Interconnection Agreement with the Interconnection Provider

- (A) The Parties acknowledge and agree that the Interconnection Agreement shall be a separate and free-standing contract and that the terms of this REPA are not binding upon the Interconnection Provider.
- (B) Notwithstanding any other provision in this REPA, nothing in the Interconnection Agreement shall alter or modify Seller's or Purchaser's rights, duties and obligations under this REPA. This REPA shall not be construed to create any rights between Seller and the Interconnection Provider.
- (C) Seller expressly recognizes that, for purposes of this REPA, the Interconnection Provider shall be deemed to be a separate entity and separate contracting party whether or not the Interconnection Agreement is entered into with Purchaser or an Affiliate of Purchaser

#### 1.3 Interpretation of Arrangements for Electric Supply to the Facility.

- (A) The Parties recognize that this REPA does not provide for the supply of any electric service by Purchaser to Seller or to the Facility and Seller must enter into separate arrangements for the supply of electric services to the Facility, including the supply of turbine unit start-up and shutdown house power and Energy.
- (B) The Parties acknowledge and agree that the arrangements for the supply of electric services to the Facility shall be separate and free-standing arrangements and that the terms of this REPA are not binding upon the supplier of such electric services.
- (C) Notwithstanding any other provision in this REPA, nothing in the arrangements for the supply of retail electric services to the Facility shall alter or modify Seller's or Purchaser's rights, duties and obligations under this REPA. This REPA shall not be construed to create any rights between Seller and the supplier of such retail electric services

(D) Seller expressly recognizes that, for purposes of this REPA, the supplier of retail electric services to the Facility shall be deemed to be a separate entity and separate contracting party whether or not the arrangements for the supply of retail electric services to the Facility is entered into with Purchaser or an Affiliate of Purchaser

#### 1.4 Definitions.

The following terms shall have the meanings set forth below when used herein:

"2012 SSO Application" shall have the meaning set forth in Section 6.1(A)

"2012 SSO Application Deadline" shall have the meaning set forth in Section 6.1(A).

"Abandonment" means, on and after the Commercial Operation Date, the relinquishment of all possession and control of the Facility by Seller, other than a transfer permitted under this REPA.

"Affiliate" of any named person or entity means any other person or entity that controls, is under the control of, or is under common control with, the named entity. The term "control" (including the terms "controls", "under the control of" and "under common control with") means the possession, directly or indirectly, of the power to

direct or cause the direction of the management of the policies of a person or entity,

whether through ownership interest, by contract or otherwise.

"Ancillary Services" means regulation and frequency response services, energy imbalance services, automatic generating control, splnning reserve, non-splnning reserve, replacement reserve, reactive power, voltage support and any other services that support the transmission of capacity and energy or the reliable operation of the Transmission Provider's transmission system, all to the extent included as ancillary services in the Transmission Operator's open access transmission tariff, in each case, to the extent commonly sold or saleable and, in each case, to the extent that the assets comprising the Facility are Eligible to provide such services under normal operating conditions.



"Back-Up Metering" shall have the meaning set forth in Section 5.4(C).

"Beneficial Environmental Interests" means all Non-Power Attributes associated in any way, directly or indirectly, with the Facility and all RECs associated with such Non-Power Attributes, excluding Renewable Energy Incentives and other federal, state or local tax credits, deductions and other tax benefits and financial incentives related to the ownership of the Facility or the sale to Purchaser of the output thereof.

"Business Day" means any calendar day that is not a Saturday, a Sunday, or a NERC Holiday.

"Capacity" means the output level, expressed in MW, that the Facility, or the components of equipment thereof, is capable, as of a given moment, of continuously producing and making available at the Point of Delivery, taking into account the operating condition of the equipment at that time, the auxiliary loads and other relevant factors. Capacity includes all installed capacity and unforced capacity attributed to the Facility by the Transmission Operator, any regional reliability organization, Governmental Authority, or that is commonly sold or saleable to third parties.

"Capacity Deficiency" means, at any time, the product of (i) 55% and (ii) the amount by which the Committed Capacity exceeds the nameplate capacity of the Commissioned Wind Turbines.

"Capacity Resource" shall have the meaning set forth in the OATT.

"Cash" shall have the meaning set forth in Section 11.1(C)(2).

"Clock Hour" means sixty-minute increments commencing at the top of the hour on the clock (i.e., 12 o'clock)

"Close of the Business Day" means 5:00 PM EPT on a Business Day.

"Commercial Operation" means the period beginning on the Commercial Operation Date and continuing through the Term of this REPA.

"Commercial Operation Date" or "COD" means the date that Seller provides notification to Purchaser, pursuant to Section 4.7, of Seller's declaration that all of the Conditions specified in Section 4.7 have occurred or otherwise been satisfied or such other date as may be deemed to be the Commercial Operation Date in accordance with Section 4.11(B)(i).

"Commercial Operation Milestone" means the anticipated Commercial Operation Date for the Facility. The Commercial Operation Milestone is specified as no later than December 31, 2011; provided, however, that the Commercial Operation Milestone shall be extended on a day-for-day basis for any delay in achieving the Commercial Operation Milestone resulting exclusively from Force Majeure.

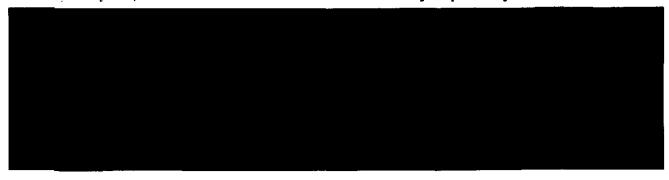
"Commission" means the Public Utilities Commission of Ohio.

"Commissioned" means, with respect to any Wind Turbine, that the requirements of Section 4.7 as they apply to such Wind Turbine have been satisfied.

"Committed Capacity" means 99 MW, subject to Section 4.11(E).

"Committed Renewable Energy" shall have the meaning set forth in Section 7.2(A).

"Communications Equipment" means the communication circuits from the Facility to Purchaser for the purpose of telemetering, supervisory control and data acquisition, transmittal of real time data as described in either Exhibit H-1 or Exhibit H-2, at Seller's option, and voice communications as reasonably required by Purchaser.



"Conditions" shall have the meaning set forth in Section 4.7.

"Consent and Agreement" means, at any given time, a Consent and Agreement in substantially the form of either Exhibit N-1 or Exhibit N-2, but not both

"Contract Administration Committee" means one representative each from Purchaser and Seller pursuant to Section 10.3.

"Contract Administration Procedures" means those procedures developed pursuant to Section 10.3.

"Contract Capacity Share" means 55% of the Facility Capacity in MW.

"Contract Rate" means the applicable rate set forth in Exhibit C.

"Contract Year" means each full calendar year of the Term, whether such calendar year is comprised of 365 or 366 Days, commencing with the first calendar year

subsequent to the year in which the Delivery Period commences, subject to the Proration Factor.

"Control Area" means the system of electrical generation, distribution, and transmission facilities within which generation is regulated in order to maintain interchange schedules with other such systems.

"Cost Recovery Order" means a final, non-appealable order from the Commission approving the terms and conditions of this REPA without modification and authorizing Purchaser to recover all of the jurisdictional costs associated with this REPA through Ohio retail rates, satisfactory to Purchaser in all respects in its sole discretion.

"Cost Recovery Request" means a request for a final, non-appealable order from the Commission approving the terms and conditions of this REPA without modification and authorizing Purchaser to recover all of the jurisdictional costs associated with this REPA through Ohio retail rates.

"Cost Recovery Waiver" shall have the meaning set forth in Section 6.1(C).

"Credit Rating" means, for any Person, the senior unsecured and non-credit-enhanced long term debt rating of such Person or, if such Person does not have a senior unsecured and non-credit-enhanced long term debt rating, the issuer rating of such Person.

"Creditworthy Bank" means a United States commercial bank or a foreign bank with a United States branch, which United States commercial bank or United States branch has at the applicable time a Credit Rating of (a) A- or better from Standard & Poor's Rating Services and (b) A3 or better from Moody's Investors Service, Inc.

"Creditworthy Entity" means a Person having at the applicable time a Credit Rating of (a) BBB or better from Standard & Poor's Rating Services and (b) Baa2 or better from Moody's Investors Service, Inc., or otherwise acceptable to Purchaser in its reasonably exercised discretion.

"Day" means a calendar day:

"Deficiency Liquidated Damages" shall have the meaning set forth in Section 4.11(D).

"Delay Liquidated Damages" shall have the meaning set forth in Section 4.10.

"Delivery Period" means the period that commences at 0000 hours on the following applicable date: (i) if the Cost Recovery Waiver occurs, the latest of (a) the first day of the month following the month in which the 2012 SSO Application Deadline occurs, (b) the first day of the month following the month in which the COD occurs, and

(c) January 1, 2012; and (ii) if the Cost Recovery Waiver does not occur, the later of (a) the first day of the month following the month in which a Cost Recovery Order becomes effective, (b) the first day of the month following the month in which the COD occurs, and (c) January 1, 2012; and in any case continues through the remainder of the Term.

"Dispute" shall have the meaning set forth in Section 13.9(A).

"Dispute Notice" shall have the meaning set forth in Section 13.9(A).

"Economic Curtailment Energy" shall have the meaning set forth in Exhibit J.

"Economic Curtailment Reimbursement Amount" shall have the meaning set forth in Exhibit J.

"Electric Metering Device(s)" means all meters, submeters, metering equipment, and data processing equipment used to measure, record, or transmit data relating to the Renewable Energy from the Facility.

"Emergency" means an emergency condition as defined under the Interconnection Agreement or the OATT.

"Energy" means three-phase, 60-cycle alternating current electric energy, expressed in MWh.

"Environmental Contamination" means the introduction or presence of Hazardous Materials at such levels, quantities or location, or of such form or character, as to constitute a violation of federal, state or local laws or regulations, and present a material risk under federal, state or local laws and regulations that the Site will not be available or usable for the purposes contemplated by this REPA.

"EPT" means Eastern Prevailing Time.

"Excused Event" means any Economic Curtailment, any Reliability Curtailment (other than as a result of Seller's acts or omissions described in clauses (iii) or (iv) of the definition thereof) and any Force Majeure event.

"Event of Default" shall have the meaning set forth in Article 12.

"Facility" means Seller's electric generating facility and Seller's Interconnection Facilities, as identified and described in Article 3 and Exhibit B to this REPA, including all of the following, the purpose of which is to produce electricity and deliver such electricity to the Point of Delivery: Seller's equipment, buildings, all of the generation facilities, including generators, turbines, step-up transformers, output breakers, facilities necessary to connect to the Point of Delivery, protective and associated equipment, improvements, and other tangible assets, contract rights, easements, rights of way, surface use agreements and other interests or rights in real estate reasonably necessary for the construction, operation, and maintenance of the electric generating facility that produces the Renewable Energy subject to this REPA.

"Facility Capacity" means the Capacity capable of being generated from the Facility based on the aggregate nameplate rating of all of the Wind Turbines comprising the Facility, but shall not exceed 99 MW at any point during the Term.

"Facility Financing" means the obligations of Seller to any Facility Financier pursuant to the Financing Documents, including principal of, premium and interest on indebtedness, fees, expenses or penalties, amounts due upon acceleration, prepayment or restructuring, swap or interest rate hedging breakage costs and any claims or interest due with respect to any of the foregoing.

"Facility Financing Representative" means, during any period when there is only one Facility Financier, the Facility Financier, and during any period when there is more than one Facility Financier, any trustee or agent on behalf of the Facility Financiers or such other single representative designated in writing by Seller.

"Facility Financiers" means, collectively, any lender(s) or any other financiers providing any Facility Financing

"Failure to Extend Condition" shall have the meaning set forth in Section 11.1(C)(1).

"Failure to Replace Condition" shall have the meaning set forth in Section 11.1(D).

"Federal Funds Effective Rate" means the rate for that day opposite the caption "Federal Funds (Effective)" as set forth in the weekly statistical release designated as H. 15 (519), or any successor publication, published by the Board of Governors of the Federal Reserve System.

"FERC" means the Federal Energy Regulatory Commission.

"Financing Documents" means the loan and credit agreements, notes, bonds, indentures, security agreements, lease financing agreements, mortgages, deeds of trust, interest rate exchanges, swap agreements and other documents relating to the development, bridge, tax equity, construction or permanent debt financing for the

Facility, including any credit enhancement, credit support, working capital financing, letter of credit facilities, and all such documents or agreements related to any refinancing or replacement of any of the foregoing, and any and all amendments, modifications, or supplements to the foregoing that may be entered into from time to time at the discretion of Seller in connection with development, construction, ownership, leasing, operation or maintenance of the Facility.

"First Request" shall have the meaning set forth in Section 6.1(B).

"Force Majeure" shall have the meaning set forth in Article 14.

"Forced Outage" means any condition at the Facility that requires unplanned removal of the Facility, or some part thereof, from service, another outage state, or a reserve shutdown state. This type of outage results from, among other things, immediate mechanical, electrical or hydraulic control system trips and operator-initiated trips in response to Facility conditions or alarms.

"GATS" means the Generation Attribute Tracking System administered by PJM Environmental Information Services, Inc. ("PJM-EIS") and providing environmental and emissions attributes reporting and tracking services to its subscribers in support of renewable portfolio standards and other information disclosure requirements that may be implemented by Governmental Authorities. GATS tracks generation attributes and the ownership of the attributes as they are traded or used to meet standards of Governmental Authorities. GATS includes any successor tracking system or systems with the same or similar purpose administered by PJM-EIS.

"GATS Certificates" means certificates recognized by GATS and associated with the generation of electricity from the Facility.

"Good Utility Practice(s)" means the practices, methods, and acts (including the practices, methods, and acts engaged in or approved by a significant portion of the wind power generation industry, the Transmission Operator or NERC) that, at a particular time, in the exercise of reasonable judgment in light of the facts known or that should reasonably have been known at the time a decision was made, would have been expected to accomplish the desired result in a manner consistent with regulation. permits, codes. standards. equipment manufacturer's recommendations, reliability, safety, environmental protection, economy, expedition. Good Utility Practices are not intended to be the optimal practice, method or act to the exclusion of all others, but rather are intended to be any of the practices, methods or acts generally accepted for facilities similar to the Facility in the region in which the Facility is located during the relevant time period. With respect to the Facility, Good Utility Practice(s) includes taking reasonable steps to ensure that:

(A) equipment, materials, resources, and supplies, including spare parts inventories, are available in commercially reasonable quantities to meet the Facility's needs;

- (B) sufficient operating personnel are available to operate the Facility on a 24 hour basis in accordance with reasonable wind industry operating practices for wind power generation equipment and are adequately experienced and trained and licensed as necessary to operate the Facility properly, efficiently, and in coordination with Purchaser and are capable of responding to reasonably foreseeable Emergency conditions whether caused by events on or off the Site;
- (C) preventive, routine, and non-routine maintenance and repairs are performed on a basis that enables, to a commercially reasonable extent, reliable, long-term and safe operation, and are performed by knowledgeable, trained, and experienced personnel utilizing proper equipment and tools;
- (D) appropriate monitoring and testing are performed to determine that equipment is functioning in compliance with this REPA;
- (E) equipment is not operated in a reckless manner, in violation of manufacturer's guidelines or in a manner unsafe to workers, the general public, or the interconnected system or in violation of applicable law; and
- (F) equipment and components meet or exceed the standard of durability that is generally used for electric generation operations of this type in the region in which the Site is located and will function properly over the full range of ambient temperature and weather conditions reasonably expected to occur at the Site (which are not Force Majeure events) and under both normal and reasonably anticipated Emergency conditions (which are not Force Majeure events).

"Governmental Authority" means any federal, state, local or municipal governmental body; any governmental, quasi-governmental, regulatory or administrative agency, commission, body or other authority exercising or entitled to exercise any administrative, executive, judicial, legislative, policy, regulatory or taxing authority or power; or any court or governmental tribunal.

"Hazardous Materials" means any substance, material or particulate matter that is regulated by any Governmental Authority as an environmental pollutant or dangerous to public health, public welfare, or the natural environment including protection of nonhuman forms of life, land, water, groundwater, and air, including any material or substance that is (i) defined as "toxic," "polluting," "hazardous waste," "hazardous material," "hazardous substance," "extremely hazardous waste," "solid waste" or "restricted hazardous waste" under any provision of local, state, or federal law; (ii) petroleum, including any fraction, derivative or additive; (iii) asbestos; (iv) polychlorinated biphenyls; (v) radioactive material; (vi) designated as a "hazardous substance" pursuant to the Clean Water Act, 33 U.S.C. §1251 et seq. (33 U.S.C. §1251); (vii) defined as a "hazardous waste" pursuant to the Resource Conservation and Recovery Act, 42 U.S.C. §6901 et seq. (42 U.S.C. §6901); (viii) defined as a "hazardous substance" pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §9601 et seq. (42 U.S.C. §9601); (ix) defined as a "chemical substance" under the Toxic Substances Control Act, 15 U.S.C.

§2601 et seq. (15 U.S.C. §2601); or (x) defined as a pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. §136 et seq. (7 U.S.C. §136).

"Indemnified Party" shall have the meaning set forth in Article 17.

"Indemnifying Party" shall have the meaning set forth in Article 17.

"Interconnection Agreement" means the separate generation interconnection agreement between Seller and the Interconnection Provider for interconnection of the Facility to the Transmission Provider's System, as such agreement may be amended from time to time.

"Interconnection Facilities" means the facilities necessary to connect Transmission Provider's System to the Point of Delivery, including breakers, bus work, bus relays, and associated equipment installed by the Interconnection Provider for the direct purpose of interconnecting the Facility, along with any easements, rights of way, surface use agreements and other interests or rights in real estate reasonably necessary for the construction, operation and maintenance of such facilities. Arrangements for the installation and operation of the Interconnection Facilities shall be governed by the Interconnection Agreement.

"Interconnection Provider" means the Transmission Operator or any Transmission Provider responsible for the operation of the Interconnection Facilities and other equipment and facilities with which the Facility interconnects at the Point of Delivery.

"Issuer" means (a) with respect to a Security Fund in the form of a letter of credit or Cash, a Creditworthy Bank, or (b) with respect to a Security Fund in the form of a payment guaranty, a Creditworthy Entity.

"Locational Marginal Price" or "LMP" means the hourly integrated market clearing marginal price for Energy, including losses and congestion, at the Point of Delivery.

"MW" means megawatt, an amount of power equal to 1,000 kilowatts or 1,000,000 watts.

"MWh" means megawatt-hour, an amount of power equal to 1,000 kilowatt-hours or 1,000,000 watt-hours.

"NERC" means the North American Electric Reliability Council.

"NERC Holiday" means every Day other than a Saturday or Sunday which the NERC declares to be a holiday for power scheduling purposes.

"Net Replacement Energy Cost" means, for any Calculation Period, the positive difference, if any, between the Replacement Energy Cost (on a \$/MWh basis)

for such Calculation Period and the Average Contract Rate (on a \$/MWh basis) for such Calculation Period

"Non-Power Attributes" means any characteristic of the Facility related to its benefits to the environment, including any avoided, reduced, displaced or off-set emissions of pollutants to the air, soil or water such as sulfur dioxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), mercury (Hg), particulates, and any other pollutant that is now or may in the future be regulated under federal, state or local pollution control laws, regulations or ordinances or any voluntary rules, guidelines or programs; and further include any avoided emissions of carbon dioxide (CO<sub>2</sub>) and any other greenhouse gas (GHG) that contributes to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere. Non-Power Attributes do not include Renewable Energy Incentives and other federal, state or local tax credits, deductions and other tax benefits and financial incentives related to the ownership of the Facility or the sale to Purchaser of the output thereof.

"OATT" means the FERC filed Open Access Transmission Service Tariff of the Transmission Operator, as it may be amended and approved by FERC.

"Operating Records" means operating logs, blueprints for construction, operating manuals, all warranties on equipment, and all documents, whether in printed or electronic format, that the Seller uses or maintains for the operation of the Facility.

"Partial COD Conditions" shall have the meaning set forth in Section 4 11(A).

"Partial Commercial Operation Date" shall have the meaning set forth in Section 4.11(A).

"Penalties" means penalties imposed by Governmental Authorities.

"Person" means an individual, corporation, limited liability company, voluntary association, joint stock company, business trust, partnership, Governmental Authority, or other entity.

"PJM" means PJM Interconnection, LLC.

"PJM Manuals and Agreements" means, collectively, (i) all instructions, rules, procedures and guidelines established by PJM, (ii) all documents and protocols issued by PJM and (iii) all agreements to which Seller, Purchaser or any Affiliates of Purchaser, on the one hand, and PJM, on the other hand, are parties, either bilaterally or in concert with other entities, as may be in effect from time to time, in each case for

the operation, planning, and accounting requirements of PJM and the PJM interchange Energy Market, including the OATT

"Point of Delivery" means the 138 kV point, as shown on Exhibit G, at which point the quantities of Renewable Energy and Ancillary Services delivered are recorded and measured by the Interconnection Provider's revenue meters.

"Pre-DP Renewable Energy Production" means all Renewable Energy Products, other than the Renewable Energy Certificates subject to the RECPA, which are produced by the Facility prior to the commencement of the Delivery Period.

"Production Tax Credits" or "PTCs" means tax credits applicable to electricity produced from certain renewable resources pursuant to 26 U.S.C. § 45, or any substantially equivalent tax credits applicable to Seller based on its ownership or operation of the Facility or on the production and sale of Renewable Energy to the Purchaser.

"Proration Factor" means, if the Contract Year in which the Delivery Period commences or the Contract Year in which this REPA is terminated or expires is less than a full calendar year, then, with respect to such Contract Year, an amount equal to a fraction, the numerator of which is the number of Days falling within the Delivery Period in such Contract Year, and the denominator of which is 365 or 366, as applicable to the calendar year that includes such Contract Year.

"Purchaser Credit Support" shall have the meaning set forth in Section 11.2.

"Qualified Operator" means a Person that has (i) substantial experience in operating and maintaining wind powered electric generation facilities in the United States and (ii) met all applicable requirements under applicable law for operating and maintaining the Facility, including the requirements of the Transmission Operator. A Person will be deemed to have such substantial experience if it is a Person that has at least five (5) years of experience in operating and maintaining wind powered electric generation facilities in the United States.

"Reliability Curtailment" means any curtailment of delivery of Renewable Energy resulting from (i) an Emergency, (ii) any other order or directive of the Interconnection Provider or the Transmission Operator, which order or directive may be directly communicated to Seller by the Interconnection Provider, the Transmission Provider or the Transmission Operator or indirectly to Seller by Purchaser promptly upon receipt thereof, (iii) Seller's failure to maintain in full force and effect any permit, consent, license, approval, or authorization from any Governmental Authority required by law to construct or operate the Facility, or (iv) Seller's operation of the Facility in a manner inconsistent with Good Utility Practices.

"Renewable Energy" means the net electric Energy generated exclusively by the Facility from wind and delivered to the Point of Delivery as measured by the Electric Metering Devices installed pursuant to Section 5.4. Renewable Energy shall be of a power quality of 60 cycle, three-phase alternating current that is compliant with the Interconnection Agreement.

"Renewable Energy Certificate" or "REC" means any credit, certificate, allowance or similar right that is related to the Non-Power Attributes of the Facility, whether arising pursuant to law, regulation, certification, markets, trading, off-set, private transaction, renewable portfolio standards, voluntary programs or otherwise. Without limiting the generality of the foregoing definitions, RECs shall include GATS Certificates and must be generated by a facility located in Ohio and approved by the Commission as qualifying as a Renewable Energy Facility as set forth under Ohio Substitute Senate Bill 221.

"Renewable Energy Incentive" means: (a) federal, state, and local tax credits or other tax incentives associated with the construction, ownership, or production of electricity from the Facility (including Production Tax Credits, credits under Sections 38 and 45 of the Internal Revenue Code as in effect from time to time during the Term and any grants paid in lieu thereof); (b) any federal, state, and local governmental or nongovernmental payments, grants or other negotiable attributes relating in any way to the Facility or the output thereof; and (c) any other form of incentive that is not a Non-Power Attribute or Beneficial Environmental Attribute that is available with respect to the Facility.

"Renewable Energy Products" means, collectively, the Renewable Energy and Ancillary Services produced by the Facility and all of the associated Capacity, RECs and other Beneficial Environmental Interests.

"REPA" means this Renewable Energy Purchase Agreement between Seller and Purchaser, including the Exhibits attached hereto.

"Replacement Energy Cost" means, for any Calculation Period, Purchaser's average cost of replacement Renewable Energy, or Energy plus Comparable Renewable Energy Certificates, over such Calculation Period, calculated in accordance with part (d) of Exhibit I.

"Resale Costs" means the greater of (i) zero and (ii) an amount equal to (a) the net payments that Purchaser would have made to Seller for Renewable Energy Products purchased under this REPA at the applicable Contract Rate, but which Purchaser failed to purchase, less (b) the net amounts realized by Seller from the resale at the Point of Delivery of the Renewable Energy Products that Purchaser was required to accept in accordance with this REPA, but which Purchaser failed to do, adjusted for the cost of transmission of Energy incurred in connection with such resale, plus (c) directly associated transaction costs. Additional costs may include any Penalties incurred by Seller as a result of the Purchaser's non-performance that are recoverable under Section 20.3.

"RFC" means the ReliabilityFirst Corporation, one of the eight regional reliability councils approved by the North American Electric Reliability Corporation (NERC).

"Scheduled Outage/Derating" means a planned interruption or reduction of the Facility's generation by Seller that both (i) has been coordinated in advance with Purchaser, with a mutually agreed start date and duration, and (ii) is required for inspection, or preventive or corrective maintenance.

"Second Agreement" shall have the meaning set forth in the Introduction to this REPA.

"Second Counterparty" shall have the meaning set forth in the Introduction to this REPA.

"Security Fund" means the fund that Seller may be required to establish and maintain, pursuant to Section 11.1, as security for its performance under this REPA.

"Seller's Interconnection Facilities" means the equipment between the high side disconnect of the step-up transformer and the Point of Delivery, including all related relaying protection and physical structures as well as all transmission facilities required to access the Transmission Provider's System at the Point of Delivery, along with any easements, rights of way, surface use agreements and other interests or rights in real estate reasonably necessary for the construction, operation and maintenance of such facilities. On the high side of the step-up transformer it includes Seller's load control equipment as provided for in the Interconnection Agreement. This equipment is located within the Site and is conceptually depicted in Exhibit B to this REPA.

"Shortfall Notice Date" shall have the meaning set forth in Section 12.1(F).

"Site" means the parcel or parcels of real property on which the Facility will be constructed and located, including any easements, rights of way, surface use agreements and other interests or rights in real estate reasonably necessary for the construction, operation and maintenance of the Facility. The Site is more specifically described in Section 3.2 and Exhibit B to this REPA.

"Term" means the period of time during which this REPA shall remain in full force and effect, and which is further defined in Article 2.

"Transmission Operator" means PJM or any successor independent system operator, regional transmission operator or other transmission operator from time to time having authority to control the transmission Control Area to which the Facility is interconnected.

"Transmission Provider" means any Person or Persons that owns, operates or controls facilities used for the transmission of Energy from the Facility in interstate commerce.

"Transmission Provider's System" means the contiguously interconnected electric transmission facilities, including Interconnection Provider's Interconnection Facilities, over which the Transmission Provider has rights to provide for the bulk transmission of Capacity and Energy from the Point of Delivery.

"Uncommitted Capacity" means the portion of Capacity installed at the Site that exceeds Purchaser's Contract Capacity Share of the Facility Capacity, with such portion (i) (ii) not to include either Purchaser's Contract Capacity Share or the Second Counterparty's Contract Capacity Share (as defined in the Second Agreement).

"Wind Turbines" means those generating devices powered by the wind that are included in the Facility.

# ARTICLE 2 TERM AND TERMINATION

This REPA shall become effective as of the date of its execution, and shall remain in full force and effect until the date that is twenty (20) years after the day before the first day of the Delivery Period, subject to any early termination provisions set forth herein (the "Term"). Applicable provisions of this REPA shall continue in effect after termination, including early termination, to the extent necessary to enforce or complete the duties, obligations or responsibilities of the Parties arising prior to termination and, as applicable, to provide for: final billings and adjustments related to the period prior to termination, repayment of any money due and owing to either Party pursuant to this REPA, repayment of principal and interest associated with security funds, the indemnifications specified in this REPA, and the resolution of disputes between the Parties.

# ARTICLE 3 FACILITY DESCRIPTION

# 3.1 <u>Summary Description</u>.

Seller shall endeavor to construct, own, operate, and maintain the Facility, which shall consist of fifty-five (55) Vestas V100 – 1.8MW Wind Turbines and associated equipment having an approximate designed maximum output of 99 MW.

Exhibit B to this REPA provides a detailed description of the Facility, including identification of the equipment and components, which make up the Facility. The aggregate nominal or "nameplate" MW rating of the Wind Turbines comprising the Facility will not exceed 99 MW at any time during the Term. Any

additional wind turbines installed on the Site in excess of such 99 MW shall not comprise the Facility but may share the same Point of Delivery or revenue meter used in connection with this REPA, subject to Seller's obligation to install submeters as described above.

#### 3.2 Location.

The Facility shall be located on the Site and shall be identified as Seller's Timber Road Facility. The Facility is located in Paulding County, Ohio. A scaled map that identifies the Site, the location of the Facility at the Site, the location of the Point of Delivery and the location of the important ancillary facilities and Interconnection Facilities, is included in Exhibit B to this REPA.

### 3.3 General Design of the Facility.

Seller shall construct the Facility in accordance with Good Utility Practice(s), the Interconnection Agreement and rules of the Transmission Operator, including the PJM Manuals and Agreements. During Commercial Operation, Seller shall maintain the Facility according to Good Utility Practice(s) and the Interconnection Agreement. In addition to the requirements of the Interconnection Agreement, the design of the Facility shall at all times include metering accuracy current transformers and voltage transformers located at the Point of Delivery (or some other point mutually agreed to by the Parties) as required to connect to the Electric Metering Devices.

# ARTICLE 4 COMMERCIAL OPERATION

## 4.1 Commercial Operation.

Subject to <u>Sections 4.10 and 4.11</u>, the Facility shall achieve the Commercial Operation Date, and shall be fully capable of reliably producing the Renewable Energy Products to be provided under this REPA and delivering such Renewable Energy Products to Purchaser at the Point of Delivery, no later than the Commercial Operation Milestone.

#### 4.2 [Intentionally Omitted].

#### 4.3 Site Report.

Seller shall conduct a Phase I environmental investigation of the Site and shall provide Purchaser, on or before sixty (60) days after the execution of this REPA, with a copy of the draft report summarizing such investigation, together with any data or information generated pursuant to such investigation.

## 4.4 Facility Contracts

Seller shall provide to Purchaser, within thirty (30) Days after execution of this REPA, a certificate of an officer of Seller, in a form reasonably acceptable to Purchaser, stating that Seller has sufficient wind turbines under contract to satisfy its obligations hereunder. Upon reasonable notice and request by Purchaser, Seller shall provide Purchaser with copies of major engineering drawings relating to the Facility. Information that is commercially sensitive, confidential or proprietary, as reasonably determined by Seller, may be redacted from the documents provided to Purchaser pursuant to this paragraph. All such information shall be treated as confidential information subject to Section 20.15 hereof. Seller shall provide sufficient information for Purchaser to be reasonably assured that Seller has contracted with financially responsible vendors as part of the Facility construction process.

### 4.5 Progress Reports.

Commencing upon the execution of this REPA, Seller shall submit to Purchaser, within the first fifteen (15) Days of each calendar month until the Commercial Operation Date is achieved, reports regarding development and construction progress in a form reasonably satisfactory to Purchaser. These progress reports shall describe the status of the development and construction of the Facility as of the end of the preceding month, including (a) a description of the progress of development and construction, (b) an explanation of any material changes in the development and construction schedule and (c) an estimate of the Commercial Operation Date. Commencing upon the date that is two months prior to the earlier of (x) the Commercial Operation Milestone and (y) the estimated Commercial Operation Date, Seller will additionally advise Purchaser weekly on the status of Wind Turbine Commissioning until the Commercial Operation Date is achieved.

#### 4.6 Purchaser's Rights During Construction.

Purchaser shall have the right to monitor the construction, start-up and testing of the Facility during normal business operating hours, and Seller shall comply with all reasonable requests of Purchaser with respect to the monitoring of these events, provided, however, that Purchaser provides Seller reasonable advance written notice, shall not unreasonably interfere with or disrupt the activities of the Seller and complies with the penultimate sentence of this Section 4.6. Seller shall cooperate in such physical inspections of the Facility as may be reasonably requested by Purchaser during and after completion of construction. All persons visiting the Facility on behalf of Purchaser shall comply with all of Seller's applicable safety and health rules and requirements. Purchaser's technical review and inspection of the Facility shall not be construed as endorsing the design thereof nor as any warranty of safety, durability, or reliability of the Facility.

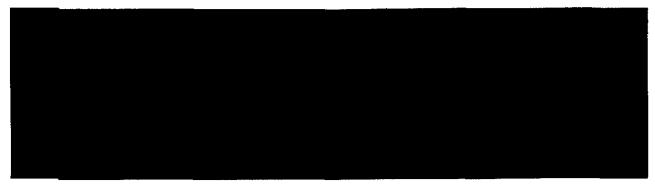
#### 4.7 Conditions to Commercial Operation.

Seller shall notify Purchaser when the Facility has achieved the Commercial Operation Date, which notice shall not be unreasonably withheld or delayed by Seller. This notification is contingent upon Seller providing evidence reasonably acceptable to Purchaser of the satisfaction or occurrence of all of the conditions set forth in this Section 4.7 ("Conditions") and shall include a declaration by Seller to that effect. The Parties agree that review and approval of such Conditions may occur on an ongoing and incremental basis, pending resolution of any dispute, as such Conditions are satisfied. The Conditions are:

- (A) Seller has successfully completed that testing of the Facility, which is required by the Interconnection Agreement for the commencement of commercial operations at the Facility;
- (B) an officer of Seller, familiar with the Facility, has provided a list of the Facility's Wind Turbines, showing the make, model, serial number and designed maximum output (nameplate capacity) of each turbine/generator;
- (C) the Facility has achieved initial synchronization with the Transmission Provider's System;
- (D) the interconnection of the Facility to the Transmission Provider's System has been completed in accordance with the Interconnection Agreement and has operated at a generation level acceptable to the Interconnection Provider in accordance with the operating requirements of the Interconnection Agreement;
- (E) Seller has made all arrangements and executed all material agreements required to deliver the Renewable Energy from the Facility to the Point of Delivery in accordance with the provisions of this REPA;
- (F) Seller shall have demonstrated that it can reliably transmit real time data and measurements with Purchaser in accordance with the requirements of either Exhibit H-1 or Exhibit H-2, at Seller's option:
- (G) all arrangements for the supply of required electric services to the Facility, including the supply of turbine unit start-up and shutdown power and Energy, house power and maintenance power have been completed by Seller separate from this REPA, are in effect, and are available for the supply of such electric services to the Facility;
- (H) the Security Fund meeting the requirements of Article 11 has been established;
- (i) certificates of insurance evidencing the coverages required by Article 16 have been obtained and submitted to Purchaser;
- (J) Seller has submitted to Purchaser a certificate of an officer of Seller familiar with the Facility after due inquiry stating that (i) all permits, consents, licenses, approvals, and authorizations required to be obtained by Seller from any Governmental

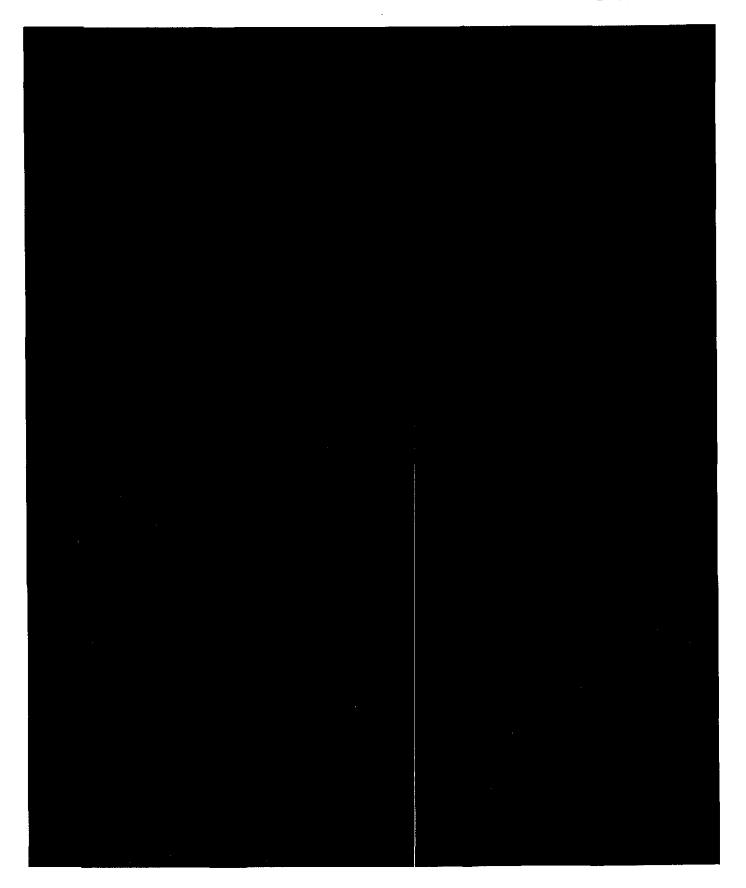
Authority to construct and operate the Facility in compliance with applicable law and this REPA have been obtained and are in full force and effect, (ii) Seller is a PJM member, and (iii) Seller is in compliance with the terms and conditions of this REPA in all material respects;

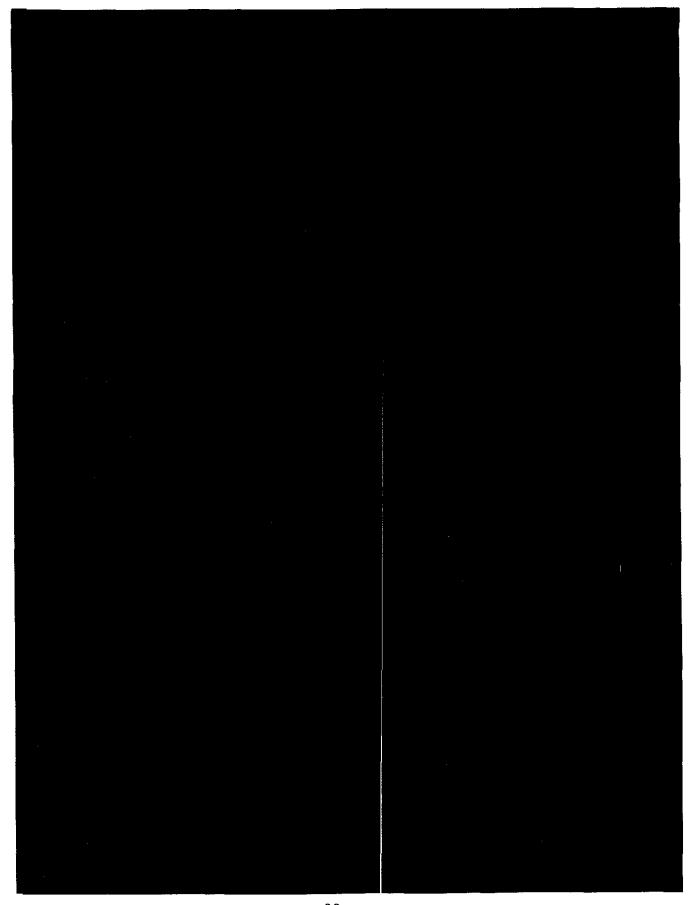
- (K) Seller has made all necessary governmental filings and applications with Governmental Authorities for accreditation and participation in GATS and in any applicable federal and Ohio REC certification program pursuant to Section 10.9;
- (L) Seller shall have provided the following items to Purchaser at least ninety (90) days prior to Commercial Operation: (1) the Wind Turbine layout of the Site with the latitude and longitude and model of each turbine and the manufacturer's power curve; (2) a non-binding, good faith 12 month x 24 hour forecast of net Energy production from the Facility; and (3) historical wind data from the Site anemometers together with a commissioning sheet or other suitably complete descriptive document for each of the Site's permanent met towers as well as all off-Site met towers; provided that the data set forth in the foregoing item (1) above shall be updated and re-submitted to the Purchaser no later than five (5) Business Days after the Commercial Operation Date.;
- (M) Seller shall have provided Purchaser with a copy of the final Phase I environmental report referred to in Section 4.3 and either (i) such report shall confirm that no conditions involving Environmental Contamination exist at or under the Site that would materially impact performance of Seller's obligations under this REPA or (ii) Seller shall provide to Purchaser prior to the Commercial Operation Date a remediation plan for removal of such Environmental Contamination; and
- (N) Seller shall have established with PJM the node (virtual unit) described in Section 5.3(A).



## 4.9 QF Waiver.

For so long as this REPA is in effect, Seller waives, and agrees not to assert, the rights Seller may have against Purchaser to cause Purchaser to purchase or transmit energy or capacity pursuant to 18 C.F.R. section 292.303 or section 292.304 by virtue of the status of the Facility as a qualifying cogeneration facility as defined in the Public Utility Regulatory Policies Act of 1978, as amended





any Wind Turbines that have been Commissioned as of the applicable date under Section 4.11(B)(iii) or (D); (ii) the Committed Capacity shall be reduced to the nameplate capacity of such Commissioned Wind Turbines; and (iii) the Committed Renewable Energy shall be reduced proportionately based on the ratio that the reduced Committed Capacity bears to the original Committed Capacity (99 MW)

# ARTICLE 5 DELIVERY AND METERING

### 5.1 Seller's and Purchaser's Obligations.

Subject to, and in accordance with, the terms and conditions of this REPA, Purchaser does hereby agree to purchase and pay for Purchaser's Contract Capacity Share of Renewable Energy Products, and Seller does hereby agree to sell and deliver, or cause to be delivered, Purchaser's Contract Capacity Share of Renewable Energy Products during the Delivery Period. Purchaser shall have the exclusive right to purchase and receive all of Purchaser's Contract Capacity Share of Renewable Energy Products during the Delivery Period, with the exception of Energy produced by Seller for its own use at the Facility for station power. Seller shall not offer, sell or make available any of Purchaser's Contract Capacity Share of Renewable Energy Products or dispatch Purchaser's Contract Capacity Share thereof to or for the benefit of Seller (except for its own use at the Facility for station power) or any other Person during the Delivery Period, other than to Purchaser.

## 5.2 Required Operation.

Except to the extent the Facility is actually unavailable or limited (including in accordance with Good Utility Practice(s) and due to curtailments under Section 7.4(A)), Seller shall operate the Facility to provide the Renewable Energy Products to Purchaser in all hours of the Delivery Period. Seller agrees that, notwithstanding anything herein to the contrary, Seller will not curtail or otherwise reduce deliveries of Renewable Energy Products in order to sell such Renewable Energy Products to other purchasers.

#### 5.3 Delivery Arrangements.

- (A) Prior to the Commercial Operation Date, Seller shall establish and shall maintain throughout the Term with PJM, a node (virtual unit) for purposes of identification of Purchaser's Contract Capacity Share of the Renewable Energy Products and the operating reserves and other charges and credits for which Purchaser is responsible under Section 5.6.
- (B) Seller shall be responsible for all interconnection, electric losses, transmission and ancillary service arrangements and costs required to deliver Purchaser's Contract Capacity Share of the Renewable Energy and Pre-DP Renewable Energy Production from the Facility to Purchaser at the Point of Delivery. Purchaser shall be responsible for all electric losses, transmission and ancillary service arrangements and costs required to receive Purchaser's Contract Capacity Share of the

Renewable Energy at the Point of Delivery and deliver such Energy to points beyond the Point of Delivery.

(C) Seller shall be responsible for paying any and all transmission upgrade costs identified by the Transmission Operator as Seller's responsibility in order to designate the Facility as a Capacity Resource.

### 5.4 Electric Metering Devices.

- (A) Seller will comply with the terms and conditions of the Interconnection Agreement. The following provisions on Electric Metering Devices shall apply only to the extent they do not conflict with the performing Party's rights and obligations under the Interconnection Agreement or the OATT, as applicable.
- (B) Seller shall provide Purchaser with reasonable advance notice of, and permit a representative of Purchaser to witness and verify, inspections and tests of the Electric Metering Devices, provided, however, that Purchaser shall not unreasonably interfere with or disrupt the activities of Seller and shall comply with all of Seller's safety standards. Upon request by Purchaser, Seller shall perform additional inspections or tests of any Electric Metering Device and shall permit a qualified representative of Purchaser to inspect or witness the testing of any Electric Metering Device, provided, however, that Purchaser shall not unreasonably interfere with or disrupt the activities of Seller and shall comply with all of Seller's safety standards. The actual expense of any such requested additional inspection of testing shall be borne by Purchaser, unless upon such inspection or testing an Electric Metering Device is found to register inaccurately by more than the allowable limits established in this Article, in which event the expense of the requested additional inspection or testing shall be borne by Seller. If requested by Purchaser in writing, Seller shall provide copies of any inspection or testing reports to Purchaser.
- Purchaser and Seller each may elect to install and maintain, at its own expense, backup metering devices ("Back-Up Metering") in addition to the Electric Metering Devices. Each Party, at its own expense, shall inspect and test its Back-Up Metering upon installation and at least annually thereafter. Each Party shall provide the other Party with reasonable advance notice of, and permit a representative of the other Party to witness and verify, such inspections and tests, provided, however, that the observing Party shall not unreasonably interfere with or disrupt the activities of the testing Party and shall comply with all of the testing Party's safety standards. Upon request by a Party, the other Party shall perform additional inspections or tests of its Back-Up Metering and shall permit a qualified representative of the requesting Party to inspect or witness the testing of such Back-Up Metering, provided, however, that the observing Party shall not unreasonably interfere with or disrupt the activities of the testing Party and shall comply with all of the testing Party's safety standards. The actual expense of any such requested additional inspection or testing shall be borne by the requesting Party, unless, upon such inspection or testing, the Back-Up Metering is found to register inaccurately by more than the allowable limits established in this Article, in which event the expense of the requested additional inspection or testing shall

be borne by the testing Party. If requested by the requesting Party in writing, the testing Party shall provide copies of any inspection or testing reports to the requesting Party.

(D) if any Electric Metering Devices, or any Back-Up Metering, are found to be defective or inaccurate, they shall be adjusted, repaired, replaced, or recalibrated as near as practicable to a condition of zero error by the Party owning such defective or inaccurate device and at that Party's expense. The Party discovering such defect or inaccuracy shall promptly notify the other Party of such discovery.

## 5.5 Adjustment for Inaccurate Meters.

- (A) The following provisions on Adjustment for Inaccurate Meters shall apply only to the extent they do not conflict with the performing Party's rights and obligations under the Interconnection Agreement or the OATT, as applicable.
- (B) If an Electric Metering Device, or Back-Up Metering, fails to register, or if the measurement made by an Electric Metering Device, or Back-Up Metering, is found upon testing to be inaccurate by more than one percent (1.0%) from the measurement made by the standard meter used in the test, an adjustment shall be made correcting all measurements by the inaccurate or defective Electric Metering Device, or Back-Up Metering, for both the amount of the inaccuracy and the period of the inaccuracy, in the following manner:
- defective or inaccurate, the Parties shall use the Back-Up Metering, if installed, to determine the amount of such inaccuracy, provided, however, that the Back-Up Metering has been tested and maintained in accordance with the provisions of this Article. If both Parties have installed Back-Up Metering, and the Back-Up Metering of both Parties is inaccurate by not more than one percent (1.0%) from the measurements made by the standard meter used in the test, the readings from the Back-Up Metering whose readings most closely conforms with the measurements made by the standard meter shall be used. In the event that neither Party has installed Back-Up Metering, or the Back-Up Metering is also found to be inaccurate by more than one percent (1.0%) from the measurement made by the standard meter used in the test, the Parties shall estimate the amount of the necessary adjustment on the basis of deliveries of Renewable Energy from the Facility during periods of similar operating conditions when the Electric Metering Device was registering accurately. The adjustment shall be made for the period during which inaccurate measurements were made.
- (D) In the event that the Parties cannot agree on the actual period during which the inaccurate measurements were made, the period during which the measurements are to be adjusted shall be the shorter of (i) the last one-half of the period from the last previous test of the Electric Metering Device to the test that found the Electric Metering Device to be defective or inaccurate, or (ii) the one hundred eighty (180) Days immediately preceding the test that found the Electric Metering Device to be defective or inaccurate.

(E) To the extent that the adjustment period covers a period of deliveries for which payment has already been made by Purchaser, Purchaser shall use the corrected measurements as determined in accordance with this Article to recompute the amount due for the period of the inaccuracy and shall subtract the previous payments by Purchaser for this period from such re-computed amount. If the difference is a positive number, the difference shall be paid by Purchaser to Seller; if the difference is a negative number, that difference shall be paid by Seller to Purchaser, or at the discretion of Purchaser, may take the form of an offset to payments due Seller by Purchaser (or by payment to Purchaser, if sufficient payments do not remain to offset). Payment of such difference by the owing Party shall be made not later than thirty (30) Days after the owing Party receives notice of the amount due, unless Purchaser elects payment via an offset.

#### 5.6 Scheduling Arrangements.

The node established pursuant to Section 5.3(A) shall be segregated in a separate sub-account or Seller's (or Seller's agent's) market participant account, which for avoidance of doubt will contain solely those charges and credits related Purchaser's Contract Capacity Share, and the Parties will effectuate delivery and receipt of Renewable Energy Products at the Point of Delivery as follows:

- (A) Seller will offer Purchaser's Contract Capacity Share of the Renewable Energy of the Facility into PJM as "Must Run Generation" (as defined in PJM Menual 35, Definitions and Acronyms. Revision: 15, Effective: April 17, 2009) utilizing the day-ahead forecast provided by Purchaser, which forecast shall be provided at least one (1) hour prior to the applicable deadline for day-ahead offers in PJM. Purchaser will have the right to review and audit Seller's day-ahead PJM offers for compliance with Purchaser's forecast. If Purchaser does not provide the day-ahead forecast as provided by this Section 5 6(A), Seller will submit the day-ahead offer using its commercially reasonable day-ahead forecast.
- (B) Seller will make appropriate, unilateral entries in PJM's eSchedule system at day-ahead LMP in a quantity for each day equal to the actual amount of Renewable Energy produced by the Facility on that day from the Purchaser's Contract Capacity Share of the Facility Capacity (as reflected in PJM's eMeter system).
- (C) Subject to Section 10.11, Purchaser will be responsible for all imbalance costs, operating reserves, congestion charges, losses and all other PJM charges incurred by Seller (or Seller's agent) in connection therewith that Purchaser would have incurred if Purchaser was scheduling and effecting settlements in its own market participant account with respect to the Renewable Energy or Capacity, and receive all credits, associated with the deviation between the day-ahead Must-Run Generation schedule submitted by Seller under Section 5.6(A) and the actual amount of Renewable Energy produced by the Facility from Purchaser's Contract Capacity Share of the Facility Capacity (as reflected in PJM's eMeter system), including the net difference between the day-ahead and real-time LMP associated with that deviation.

- Seller shall be responsible for all costs related to delivery of Pre-DP Renewable Energy Production and Renewable Energy to the Point of Delivery or to the extent any such costs are incurred as a result of the failure by Seller to curtail deliveries in connection with a Reliability Curtailment or Economic Curtailment. Subject to Section 10.11, Purchaser shall be responsible for all imbalance costs, operating reserves, congestion costs, losses and all other PJM charges incurred by Seller (or Seller's agent) that Purchaser would have incurred if Purchaser was scheduling and effecting settlements in its own market participant account with respect to the Renewable Energy and Capacity, and receive all associated credits, at the Point of Delivery and for delivery of its Contract Capacity Share of the Renewable Energy or Capacity at and from the Point of Delivery, excluding any such costs arising from the failure by Seller to curtail deliveries in connection with a Reliability Curtallment or Economic Curtailment. To the extent either Party (or its agent) incurs costs or expenses which are the responsibility of the other Party under this Section 5.6, such costs or expenses shall be added to or shall be netted against the invoice for Renewable Energy. In the event that after the date of execution of this REPA, the PJM Manuals and Agreements governing costs and expenses to be paid by schedulers of Renewable Energy are modified resulting in a material effect on the allocation of the PJM charges or credits incurred by Seller (or Seller's agent) in connection with scheduling the Renewable Energy or Capacity that Purchaser would have incurred if Purchaser was scheduling and effecting settlements with respect to the Renewable Energy or Capacity or any credits associated therewith, the Parties hereby agree to amend this REPA to effectuate the intent of this Section 5.6, notwithstanding such modification of the PJM Manuals and Agreements.
- (E) The parties will effectuate the delivery and receipt of Capacity from Purchaser's Contract Capacity Share of the Facility Capacity by timely making and confirming appropriate unit specific, bilateral transactions in PJM's eRPM system of "Unoffered Capacity" (as defined in PJM Manual 18, PJM Capacity Market, Revision: 7, Effective: August 18, 2009).

# ARTICLE 6 CONDITIONS PRECEDENT

### 6.1 Purchaser's Condition Precedent.

- (A) It shall be a condition precedent to Purchaser's obligations under Sections 5.1 and 7.2 to purchase Purchaser's Contract Capacity Share of all Renewable Energy Products generated by the Facility commencing on the first day of the Delivery Period that Purchaser shall have received a Cost Recovery Order. Purchaser expects to file, on or prior to March 1, 2011, an application before the Commission for approval of a Standard Service Offer under Ohio Revised Code 4928 141 for the period commencing January 1, 2012 (the "2012 SSO Application"); however, the Commission may extend the date by which Purchaser must file the 2012 SSO Application (such March 1, 2011 date or later date, as applicable, the "2012 SSO Application Deadline").
- (B) Accordingly, on or prior to the 2012 SSO Application Deadline, Purchaser shall file its first Cost Recovery Request with the Commission (the "First

Request"). Purchaser may, but shall not be obligated to, include the First Request in the 2012 SSO Application. The form of the First Request and the conduct by Purchaser of any proceedings, including any settlement or appeals, related to or arising from the First Request shall be determined in the sole discretion of Purchaser.

- (C) If Purchaser fails to file a timely First Request on or prior to the 2012 SSO Application Deadline, the condition precedent set forth in Section 6.1(A) shall be deemed walved (such waiver, the "Cost Recovery Waiver").
- (D) If Purchaser files a timely First Request on or before the 2012 SSO Application Deadline, and Purchaser obtains a Cost Recovery Order, then commencing on the later of the first day of the first month following the issuance of such Cost Recovery Order or January 1, 2012, Purchaser shall be obligated to purchase and pay for all Renewable Energy Products delivered by Seller under Sections 5.1 and 7.2. Purchaser shall notify Seller of the receipt of such Cost Recovery Order within five (5) Business Days of the effectiveness thereof.
- (E) If Purchaser files a timely First Request on or before the 2012 SSO Application Deadline, but Purchaser does not obtain a Cost Recovery Order on or prior to December 31, 2012, then Purchaser may terminate this REPA without any further financial or other obligation by either Party as a result of such termination by delivering written notice to Seller. If Purchaser determines that a Cost Recovery Order can not be obtained, Purchaser will promptly notify Seller of such termination on or before December 31, 2012.
- (F) If Purchaser files a timely First Request on or prior to the 2012 SSO Application Deadline, but Purchaser subsequently withdraws its Cost Recovery Request, then within ninety (90) days of the issuance by the Commission of an order in the proceeding from which Purchaser's request has been withdrawn, Purchaser shall file a stand-alone Cost Recovery Request with the Commission. In the event that Purchaser files such stand-alone Cost Recovery Request but does not obtain a Cost Recovery Order on or prior to the earlier of (i) 180 days from the filing of such Cost Recovery Request or (ii) December 31, 2012, then Purchaser may terminate this REPA without any further financial or other obligation by either Party as a result of such termination by delivering written notice to Seller within ninety (90) days of such earlier date.

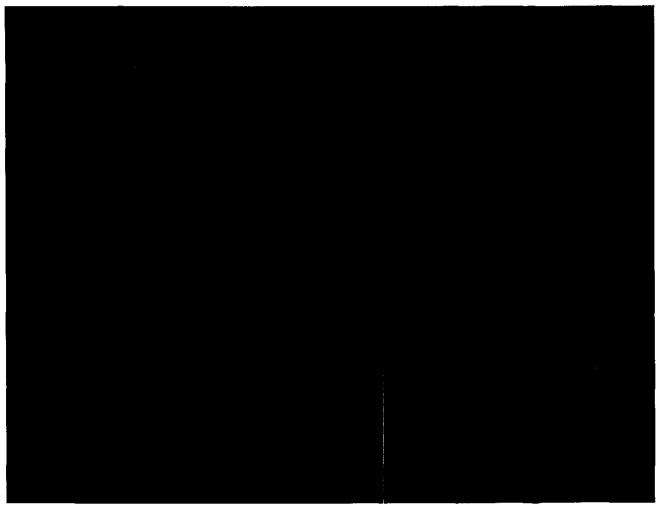


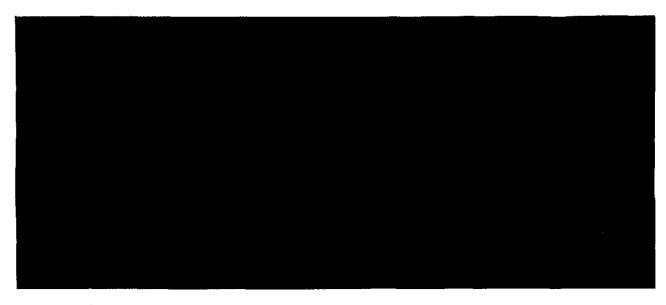
## 6.2 [Intentionally omitted].

# ARTICLE 7 SALE AND PURCHASE OF RENEWABLE ENERGY

## 7.1 Sale and Purchase.

Beginning on the Commercial Operation Date, Seller shall generate from the Facility, deliver to the Point of Delivery, and sell to Purchaser, and Purchaser shall purchase and pay for, at the Contract Rate, Purchaser's Contract Capacity Share of all Renewable Energy generated by the Facility. To the extent Energy is delivered contrary to an Economic Curtailment or Reliability Curtailment, Purchaser shall pay for such Energy at the rates provided herein, but such purchase price shall be reduced by all net costs (including any positive difference between the Contract Rate and the LMP) incurred by Purchaser as a result of using or disposing of any Energy deliveries contrary to an Economic Curtailment or Reliability Curtailment.





## 7.3 <u>Title and Risk of Loss</u>.

As between the Parties, Seller shall be deemed to be in control of the Renewable Energy output from the Facility up to the Point of Delivery, and Purchaser shall be deemed to be in control of Purchaser's Contract Capacity Share of such Renewable Energy output from and after the Point of Delivery. Title and risk of loss related to the Renewable Energy delivered by Seller to Purchaser hereunder shall transfer from Seller to Purchaser at the Point of Delivery. Title and risk of loss of the Renewable Energy Certificates and any Comparable Renewable Energy Certificates shall pass from Seller to Purchaser as provided in the rules governing GATS.

## 7.4 <u>Curtailments</u>.

Seller shall at all times during the Term comply with the directives of the Transmission Operator, the Transmission Provider and the Interconnection Provider given pursuant to the Interconnection Agreement. In addition, Purchaser shall have the right to notify Seller, by telephonic communication or other method as reasonably determined by Purchaser, of a Reliability Curtailment directed by the Transmission Operator, the Transmission Provider or the Interconnection Provider or of an Economic Curtailment. In all cases of Reliability Curtailment, Seller shall reduce the net Energy delivered by the Facility at the Point of Delivery to the level directed by the Transmission Operator, the Transmission Provider or the Interconnection Provider, as applicable. If Purchaser receives any such directive of Reliability Curtailment, Purchaser shall promptly notify Seller of the maximum amount of Renewable Energy, if any, during such Reliability Curtailment that Seller may continue to deliver and Seller shall ensure that the amount of net Energy delivered by the Facility at the Point of Delivery does not exceed such amount. Except as provided in Section 7.1, no compensation shall be due from Purchaser to Seller as a result of any curtailment of the Facility's generation arising from any Reliability Curtailment directed by the Transmission Operator, the Transmission Provider or the Interconnection Provider, Any Economic Curtailment by Purchaser shall be of Purchaser's entire Contract Capacity Share of Facility Capacity. The compensation that shall be paid by Purchaser to Seller during periods of Economic

Curtailment shall be calculated in accordance with a state and will be Seller's sole compensation from Purchaser as a result of Economic Curtailment.

(B) Each Party agrees and acknowledges that (i) the damages that Seller would incur due to a curtailment by Purchaser would be difficult or impossible to predict with certainty, (ii) the Economic Curtailment Reimbursement Amounts contemplated by this provision are a fair and reasonable calculation of such damages, and (iii) the required payment by Purchaser of such Economic Curtailment Reimbursement Amounts shall be Seller's sole remedy for such curtailment. An Economic Curtailment shall not be an Event of Default.

### 7.5 Reductions for Curtailments.

- (A) In the event of a Reliability Curtailment, Force Majeure event, a Forced Outage, a Scheduled Outage/Derating or other planned or unplanned outage of the Facility, Seller shall allocate the curtailment ratably among purchasers of Facility output, by delivering to Purchaser its Contract Capacity Share of the non-curtailed level of output.
- (B) During periods of Economic Curtailment by Purchaser, (i) Purchaser's Contract Capacity Share shall be reduced to zero (0), (ii) Seller shall curtail operation of Wind Turbine capacity representing a percentage of the Facility Capacity most closely corresponding to the portion of Purchaser's Contract Capacity Share of Facility Capacity, and (iii) Seller may continue to operate the Uncommitted Capacity.
- (C) During periods of a curtailment comparable to an Economic Curtailment required by any other purchaser of a portion of the output of the Facility, (i) to the extent Seller curtails output from the Facility as a result of such curtailment, Purchaser's Contract Capacity Share shall be increased to an amount to be determined by dividing (a) the difference between the Facility Capacity and the curtailed amount by (b) Purchaser's Contract Capacity Share, and (ii) Seller shall, to the extent it is required to do so under its agreement with the curtailing purchaser, curtail operation of Wind Turbine capacity representing a percentage of the Facility Capacity most closely corresponding to the portion of the Facility Capacity that the curtailing purchaser is entitled to receive in the absence of the required curtailment.

### 7.6 Renewable Energy incentives.

- (A) Subject to the provisions of this REPA addressing an Economic Curtailment, if, for any reason, Seller does not receive the Renewable Energy Incentives for any period, the cost of Renewable Energy Products delivered to Purchaser under this REPA shall not be affected, and the risk of not obtaining the Renewable Energy Incentives shall be borne solely by Seller.
- (B) Seller shall be entitled to all Renewable Energy Incentives, and Purchaser acknowledges that Seller has the right to sell or transfer the Renewable Energy Incentives, at any rate and upon any terms and conditions that Seller may determine in its sole discretion without liability to Purchaser hereunder. Purchaser shall

have no claim, right or interest in such Renewable Energy Incentives or in any amount that Seller realized from the sale of such incentives.

# ARTICLE 8 PAYMENT CALCULATIONS

- 8.1 <u>Payments at Contract Rate.</u> Commencing on the first day of the Delivery Period, Purchaser shall pay Seller for Purchaser's Contract Capacity Share of Renewable Energy delivered to Purchaser by Seller to the Point of Delivery and for other Renewable Energy Products associated therewith at the Contract Rate set forth in Exhibit C.
- 8.2 <u>No Payment Obligation.</u> For avoidance of doubt, Purchaser shall not be obligated to make any payment to Seller under Section 8.1 for any Energy which, regardless of reason or event of Force Majeure affecting either Party, (i) does not qualify as Renewable Energy, (ii) is not measured by the Electric Metering Device(s) installed pursuant to Section 5.4, as such measurement may be adjusted pursuant to Section 5.5, or (iii) is delivered to Purchaser at a location other than the Point of Delivery.

# ARTICLE 9 BILLING AND PAYMENT

### 9.1 Billing Invoices.

The monthly billing period shall be the calendar month. No later than ten (10) Business Days after the end of each calendar month, Seller shall provide to Purchaser, by first-class mail or electronically, an invoice for the amount due Seller by Purchaser for the services provided by Seller and purchased by Purchaser, under this REPA, during the previous calendar month billing period. Seller's invoice will show all billing parameters, Contract Rates and factors, and any other data reasonably pertinent to the calculation of monthly payments due to Seller. Seller's failure to timely provide Purchaser with the monthly invoice shall not waive Purchaser's responsibility for payment under the terms stated in Section 9.2 below, except as provided in Section 13.9(B).

#### 9.2 Payments.

Unless otherwise specified herein, payments due under this REPA shall be due and payable on or before the later of (i) the twentieth (20th) Day of the month following the month to which such payment relates and (ii) the tenth (10th) Business Day following receipt of the billing invoice. Unless Seller directs Purchaser otherwise, all payments by Purchaser to Seller shall be made by electronic funds transfer. If the amount due is not paid on or before the due date, a late payment charge shall be applied to the unpaid balance and shall be added to the next billing statement. Such late payment charge shall be calculated using an annual interest rate equal to the prime lending rate as may from time to time be published in *The Wall Street Journal* under "Money Rates" on such Day (or if not published on such Day on the most recent preceding Day on which published), plus two percent (2%). If the due date occurs on a Day that is not a

Business Day, the late payment charge shall begin to accrue on the next succeeding Business Day.

#### 9.3 Billing Disputes.

Purchaser may dispute invoiced amounts on or prior to the second (2<sup>nd</sup>) anniversary of the issuance of the invoice related to such invoiced amounts, but shall pay to Seller the undisputed portion of invoiced amounts on or before the invoice due date. To resolve any billing dispute, the Parties shall use the procedures set forth in Section 13.9. When the billing dispute is resolved, the Party owing shall pay the amount owed within five (5) Business Days of the date of such resolution, with late payment interest charges calculated on the amount owed in accordance with the provisions of Section 9.2 from the date such amount was originally due. Purchaser and Seller at any time may offset against any and all amounts that may be due and owed to the other Party under this REPA any amounts that are owed by such other Party to Purchaser or Seller, as applicable, pursuant to this REPA including damages and other payments. Undisputed and non-offset portions of amounts invoiced under this REPA shall be pald on or before the due date or shall be subject to the late payment interest charges set forth in Section 9.2.

# ARTICLE 10 OPERATIONS AND MAINTENANCE

### 10.1 Facility Operation.

Seller shall staff, control, and operate the Facility consistent at all times—with Good Utility Practice(s) and the Contract Administration Procedures developed pursuant to Section 10.3. Personnel capable of starting, operating, and stopping the Facility shall be available, either at the Facility or capable of remotely starting, operating and stopping the Facility within ten (10) minutes' notice—In all cases, personnel capable of starting, operating, and stopping the Facility shall be continuously reachable by phone or pager. Seller shall maintain the Communications Equipment in good operating order at all times during the Term.

#### 10.2 Outage and Performance Reporting.

- (A) Seller shall comply with all NERC, RFC and the Transmission Operator generating unit outage and performance reporting requirements, as they may be revised from time to time, and as they apply to the Facility.
- (B) When Forced Outages of ten percent (10%) or greater of the Wind Turbines that are part of the Facility occur, Seller shall notify Purchaser of the existence, nature, and expected duration of the Forced Outage as soon as practical, but in no event later than (i) thirty (30) minutes after the Forced Outage occurs if it occurs during normal business hours or (ii) the beginning of normal business hours if such Forced Outage occurs outside of normal business hours. Seller shall thereafter inform Purchaser of changes in the expected duration of the Forced Outage unless relieved of this obligation by Purchaser for the duration of each Forced Outage.

(C) Seller shall provide Purchaser with prompt notice of any malfunction or other failure of the Communications Equipment.

# 10.3 <u>Contract Administration Committee and Contract Administration</u> Procedures.

- (A) Purchaser and Seller shall each appoint one representative and one alternate representative to act in matters relating to the Parties' performance obligations under this REPA and to develop operating arrangements for the generation, delivery and receipt of Renewable Energy hereunder. Such representatives shall constitute the Contract Administration Committee, and shall be as specified on Exhibit D. The Parties shall notify each other in writing of such appointments and any changes thereto. The Contract Administration Committee shall have no authority to modify the terms or conditions of this REPA.
- (B) Prior to the Commercial Operation Date, the Contract Administration Committee shall develop mutually agreeable written Contract Administration Procedures which shall include, but not be limited to, method of day-to-day communications; metering, telemetering, telecommunications, and data acquisition procedures; key personnel list for applicable Purchaser and Seller operating centers; operations and maintenance scheduling and reporting; Renewable Energy reports; unit operations log; and such other matters as may be mutually agreed upon by the Parties.

## 10.4 Access to Facility.

Appropriate representatives of Purchaser shall at all reasonable times, including weekends and nights, and with reasonable prior notice, have access to the Facility to read meters, to perform maintenance and service of Purchaser's equipment and to perform all inspections and operational reviews as may be reasonably appropriate to facilitate the performance of this REPA; provided that Purchaser does not interfere in any material respect with the operation of the Facility, and causes all persons visiting the Facility on its behalf to comply with all of Selfer's applicable safety, health and similar rules and requirements.

### 10.5 Reliability Standards

Seller shall operate the Facility in a manner that complies in all material respects with all national and regional reliability standards, including standards set by the Transmission Operator, RFC, NERC and the FERC, or any successor agencies setting reliability standards for the operation of generation facilities. To the extent that Seller does not operate the Facility in accordance with such standards that result in monetary penalties being assessed to Purchaser by the Transmission Operator, RFC, NERC, or the FERC, Seller shall reimburse Purchaser for its share of such monetary penalties.

#### 10.6 Beneficial Environmental Interests.

The Parties acknowledge that future or existing legislation or regulation may create value in the ownership, use or allocation of the Beneficial Environmental Interests of the

Facility. Purchaser shall own or be entitled to claim Purchaser's Contract Capacity Share of all Beneficial Environmental Interests to the extent they may exist during the Term.

#### 10.7 Availability Forecast.

- (A) On or prior to the tenth Business Day of each month commencing after the Commercial Operation Date, Seller will furnish Purchaser with a notice setting forth its good faith estimate of (i) the hourly availabilities of the Facility for such month and the next month and (ii) the expected average daily availability of the Facility for each of the ten (10) months subsequent to such next month. With respect to the preceding clause (A)(i), if Seller later updates its availability estimates for such periods, it shall deliver to Purchaser a revised notice setting forth its then current good faith estimate of hourly availabilities of the Facility for the balance of such month and for the next month. Seller does not guarantee the accuracy of said notices and said notices are only intended to be its good faith estimate of the projected availability of the Facility at the time such notice is given.
- (B) Seller shall furnish to Purchaser a notice substantially in the form attached hereto as Exhibit K (an "Availability Notice") at or before 9:00 a.m. EPT on the Business Day immediately prior to the first Day to which such Availability Notice shall relate that shall set forth the Facility Capacity that Seller anticipates will actually be available in each hour through the next Business Day and each subsequent Business Day to which such Availability Notice relates. Seller also shall furnish to Purchaser a revised Availability Notice promptly after the occurrence of any Force Majeure event, Forced Outage, unscheduled outage or other unplanned maintenance, derating, or other event that would reduce or interrupt Renewable Energy or Ancillary Services associated with Purchaser's Contract Capacity Share of Facility Capacity or cause the controlling Availability Notice to be inaccurate or incomplete in any material respect, with a description of the circumstances thereof. Each such Availability Notice shall be effective until delivery of a subsequent Availability Notice. Seller does not guarantee the accuracy of said Availability Notices, and said Availability Notices are only intended to be its good faith estimate of the projected availability of the Facility at the time such notice is given.

#### 10.8 Planned Maintenance Schedule.

No later than (a) the Commercial Operation Date and (b) two months prior to each calendar year thereafter during the Term, Seller shall submit to Purchaser a schedule of planned maintenance for the following calendar year for the Facility, which schedule shall be updated by Seller by each March 31 and September 30 thereafter to cover the twelve month period following each such update. Such schedule shall be consistent with the requirements of Good Utility Practice and the Interconnection Agreement, and otherwise in accordance with this REPA. No planned maintenance of the Facility substation or any other portion of the Facility that would affect the availability of more than 10% of the Facility Capacity at any one time may be scheduled during the months of January, February, June, July, August or December during the Delivery Period;

provided, however, that planned maintenance may be scheduled during such period to the extent (i) required by or necessary to preserve any equipment warranties or (ii) the failure to perform such planned maintenance is contrary to operation in accordance with Good Utility Practice(s). Such schedule, and each supplement thereto, shall indicate the planned commencement and completion dates for each planned maintenance during the period covered thereby, as well as the affected portion(s) of the Facility. If Purchaser desires to change the scheduled commencement or duration of planned maintenance, the Purchaser shall notify the Seller of the requested change and the Seller shall use reasonable efforts to accommodate the requested change. At least one (1) week prior to any planned maintenance, Seller shall notify Purchaser via e-mail or telephonically of the expected commencement date of such planned maintenance and the expected completion date of such planned maintenance. As soon as practicable, all such telephonic notification shall be confirmed in writing.

### 10.9 <u>REC Certification</u>.

- (A) Seller shall be responsible for causing the GATS Certificates delivered under this REPA to meet all requirements for entry into GATS and as otherwise specified by the PJM-EIS. Seller shall be responsible for registering and maintaining compliance during the duration of this REPA with GATS and the PJM-EIS and will be responsible for timely delivery as allowed by GATS and the PJM-EIS.
- (B) Seller shall, at its own cost, take all actions necessary to register for and maintain participation in any applicable system or program established by the federal Governmental Authority or the State of Ohio to monitor, track, certify or trade RECs. To the extent necessary, Seller shall assign to Purchaser all rights, title and authority for Purchaser to register, own, hold and manage certificates that represent RECs in Purchaser's own name and to Purchaser's account, including any rights associated with any such renewable energy information or tracking system that may be established with regard to monitoring, tracking, certifying, or trading such RECs. Upon the request of Purchaser from time to time, at no cost to Purchaser, (i) Seller shall deliver or cause to be delivered to Purchaser such attestations/certifications of RECs as may be required to comply with any such certification system or program, and (ii) Seller shall provide full cooperation in connection with Purchaser's registration and certification of RECs. Purchaser shall assist Seller with the matters described in this subsection (B) to the extent reasonably requested by Seller during the Term.

#### 10.10 Public Statements/Other Use.

Without the written consent of Purchaser, Seller shall not (1) make any public statement or representation that is inconsistent with Purchaser's entitlement to the Renewable Energy Products (or any portion thereof), (2) use the Purchaser's Contract Capacity Share of the Facility's Beneficial Environmental Interests to meet any federal, state or local renewable energy requirement, renewable energy procurement, renewable energy portfolio standard or other renewable energy mandate, or (3) advertise, market, sell, retire, convey or otherwise transfer or seek to transfer the Purchaser's Contract

Capacity Share of the Facility's Beneficial Environmental Interests, which rights are expressly reserved to Purchaser during the Term of this REPA.

### 10.11 Real-Time Information.

Seller will use commercially reasonable efforts on and after the Commercial Operation Date to continuously transmit real-time data to Purchaser in compliance with either Exhibit H-1 or Exhibit H-2, at Seller's option. Purchaser and Seller shall each bear the cost of and responsibilities for their respective systems, equipment and communications links required for receipt of such real-time information. In the event that Seller fails to continuously transmit real-time data to Purchaser in compliance with either Exhibit H-1 or Exhibit H-2, at Seller's option, and such real-time data transmission has not been restored within 2 Business Days after Purchaser notifies Seller of the failure thereof, Seller shall be responsible for all imbalance costs, operating reserves, and congestion costs under Section 5.6(C) and (D) until such time as the transmission of real-time data has been restored.

#### 10.12 Web-Based Operational Reporting.

Purchaser may at its option make available to Seller on the Internet a web-based reporting system which will provide the Parties with the capability to generate and submit standardized reports for purposes of satisfying the requirements of the Parties contained in Sections 10.2, 10.7 and 10.8. Purchaser will develop user requirements for such reporting system in consultation with Seller.

# ARTICLE 11 SECURITY FOR PERFORMANCE

#### 11.1 Seller Security Fund.

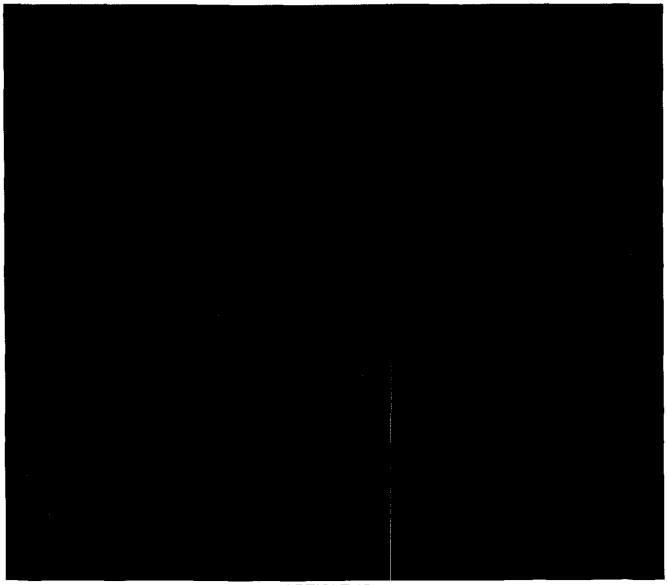
(A) Seller shall establish the Security Fund at the amount of after the date this REPA is fully executed, and Seller shall thereafter maintain the Security Fund, if necessary, at such level throughout the Term; provided that if this REPA is terminated by Purchaser pursuant to Section 6.1(E), Purchaser shall release the Security Fund to Seller

(B) In addition to any other remedy available to it, Purchaser may, before or after termination of this REPA and so long as the Security Fund is required to be outstanding after termination of this REPA pursuant to Section 11.1(F), draw from the Security Fund. Purchaser may, in its sole discretion, draw all or any part of such amounts due to it, (including amounts due under the RECPA) from any form of Security Fund, and from all such forms, and in any sequence Purchaser may select. Any failure to draw upon the Security Fund or other security for any damages or other amounts due to Purchaser shall not prejudice Purchaser's rights to recover such damages or amounts in any other manner.

- (C) The Security Fund shall be maintained at Seller's expense, shall be issued by or deposited in an Issuer (as applicable), and shall be in the form of one or more of the following instruments. Seller may replace the form of the Security Fund at any time and from time to time upon reasonable prior notice to Purchaser, but the Security Fund must at all times be comprised of one or any combination of the following:
- An irrevocable standby letter of credit in substantially the form of Exhibit L from an Issuer that is a Creditworthy Bank. Such security must be issued for a minimum term of three hundred and sixty (360) Days. Seller shall cause the renewal or extension of the security for additional consecutive terms of three hundred and sixty (360) Days or more (or, if shorter, the remainder of the period described in Section 11.1(F)) no later than thirty (30) Days prior to each expiration date of the security. If the security is not renewed or extended as required herein (such condition, the "Failure to Extend Condition"), Purchaser shall have the right to draw immediately upon the letter of credit and be entitled to hold the amounts so drawn as security, provided Purchaser satisfies the conditions of Section 11.1(C)(2)(i). If Purchaser does not meet the conditions of Section 11.1(C)(2)(i), Purchaser will place the amounts so drawn in an interest bearing account or escrew in accordance with Section 11.1(C)(2)(ii), until and unless Seller provides a substitute form of such security meeting the requirements of this Section 11.1. Such amounts shall constitute part of the Security Fund pursuant to Section 11.1(C)(2) for all purposes of this REPA (including for the return of such Cash to Seller according to Section 11.1(F)).
- States currency ("Cash") deposited with (i) United Purchaser, provided that Purchaser satisfies the following conditions: (a) it is not a defaulting Party and (b) Purchaser is a Creditworthy Entity. In such event, Purchaser will pay interest to Seller on Cash held at the Federal Funds Effective Rate and may draw on the Cash only in the circumstances, and in the amounts, that a letter of credit in the form of Exhibit L could be drawn (except that the Failure to Extend Condition or Failure to Replace Condition shall not apply as a valid reason for disbursement); or (ii) if, and only if, Purchaser does not meet the aforementioned conditions of Section 11.1(C)(2)(i), then the Cash shall be held with an Issuer that is a Creditworthy Bank, either: (a) in an account under which Purchaser is designated as beneficiary with sole authority to draft from the account or otherwise access the security only in the circumstances, and in the amounts, that a letter of credit in the form of Exhibit L could be drawn (except that the Failure to Extend Condition or Failure to Replace Condition shall not apply as a valid reason for disbursement); or (b) held by Issuer as escrow agent with instructions to pay claims made by Purchaser pursuant to this REPA, such instructions to allow drawing by Purchaser only in the circumstances, and in the amounts, that a letter of credit in the form of Exhibit L could be drawn (except that the Failure to Extend Condition or Failure to Replace Condition shall not apply as a valid reason for disbursement). Security held pursuant to Section 11.1(C)(2)(ii) shall be subject to the following: (x) include a requirement for prompt notice to Purchaser from Seller in the event that the sums held as security in the account or escrow do not at any time meet the required level for the Security Fund as set forth in this Section 11.1 and (y) funds held in the account or escrow may be deposited in a money-market fund, short-term treasury obligations, investment-grade commercial paper and other liquid

investment-grade investments with maturities of three months or less, with all investment income thereon to be taxable to, and to accrue for the benefit of, Seller. Seller grants to Purchaser a present and continuing first priority security interest in all Cash which has been transferred to Purchaser or held by Issuer. At such times as the balance of Cash held by Purchaser or by Issuer exceeds the amount of Seller's obligation to provide security hereunder, Purchaser shall remit to Seller on demand any excess in the account above Seller's obligations.

- (3) A guaranty in substantially the form of Exhibit M from an Issuer that is a Creditworthy Entity.
- If the Issuer of any Security Fund instrument ceases to be a Creditworthy Bank (in the case of a letter of credit Issuer or holder of Cash) or a Creditworthy Entity (in the case of an Issuer of a payment guaranty) or any Security Fund instrument ceases to be in full force and effect, then Seller shall be required to replace the affected Security Fund instrument with another Security Fund instrument meeting the criteria set forth in Section 11.1(C) no later than ten (10) Days after receiving notice from Purchaser that such replacement of the Security Fund instrument is required pursuant to this Section 11.1(D). If the Security Fund instrument is a letter of credit and is not replaced as required herein (such condition, the "Failure to Replace Condition"), Purchaser shall have the right to draw immediately upon the letter of credit and be entitled to hold the amounts so drawn as security, provided Purchaser satisfies the conditions of Section 11.1(C)(2)(i). If Purchaser does not meet the conditions of Section 11.1(C)(2)(i), Purchaser will place the amounts so drawn, in an interest bearing account or escrow in accordance with Section 11.1(C)(2)(ii), until and unless Seller provides a substitute form of such security meeting the requirements of this Section 11.1. Such amounts shall constitute part of the security pursuant to Section 11.1(C)(2) for all purposes of this REPA (including for the return of such Cash to Seller according to Section 11.1(F)).
- (E) If any Security Fund instrument is replaced in accordance with Section 11.1(C) or 11.1(D), (i) if the Security Fund instrument replaced is Cash, Purchaser shall immediately return the Cash (including any interest earned thereon) to Seller, or (ii) if the Security Fund instrument being replaced is not Cash, the Issuer shall be deemed released from all obligations under such replaced Security Fund instrument, and Purchaser shall execute any documents reasonably requested by Seller or the Issuer thereof to confirm such release.
- (F) On the later of (i) ninety (90) days after the termination or expiration of this REPA or (ii) the resolution of all then-pending disputes under this REPA, (a) if Cash is part of the Security Fund, Purchaser shall immediately return to Seller such Cash (together with any interest earned thereon), and (b) if a guaranty or letter of credit is part of the Security Fund, the Issuer(s) that provided or issued such Security Fund instrument shall be deemed released from all obligations under such Security Fund instrument, and Purchaser shall execute any documents reasonably requested by Seller or the Issuer thereof to confirm such release.



ARTICLE 12
DEFAULT AND REMEDIES

### 12.1 Events of Default of Seller

- (A) Any of the following shall constitute an "Event of Default" of Seller upon its occurrence and no cure period shall be applicable:
  - (1) Seller's dissolution or liquidation;
- (2) Seller's assignment of this REPA or any of its rights hereunder for the benefit of creditors (except for an assignment to the Facility Financing Representative as security under the Financing Documents as permitted by this REPA);
- (3) Seller's voluntary filing of a petition in bankruptcy or insolvency or for reorganization or arrangement under the bankruptcy laws of the United

States or under any insolvency act of any state, or Seller voluntarily taking advantage of any such law or act by answer or otherwise;

- (4) The filing of a case in bankruptcy or any proceeding under any other insolvency law against Seller or the Issuer providing a guaranty pursuant to Section 11(C)(3) hereof as debtor, and such case or proceeding has not been dismissed within sixty (60) Days;
- (5) The sale by Seller to a third party, or diversion by Seller for any use, of Renewable Energy Products committed to Purchaser by Seller, except to the extent permitted by this REPA; or
- (B) Seller's failure to comply with its obligations under Section 11.1 shall constitute an Event of Default of Seller if not cured within five (5) Business Days after the date of written notice from Purchaser to Seller and the Facility Financing Representative as provided for in Section 13.1;
- (C) Seller's failure to make any payment required under this REPA (net of any other rights of offset that Seller may have pursuant to Section 9.3), shall constitute an Event of Default of Seller if not cured within ten (10) Days after the date of written notice from Purchaser to Seller and the Facility Financing Representative as provided for in Section 13.1:
- (D) Any of the following shall constitute an Event of Default of Seller if not cured within thirty (30) Days after the date of written notice from Purchaser to Seller and the Facility Financing Representative as provided for in Section 13.1:
  - (1) Abandonment:
- (2) Seller's failure to maintain in effect any material agreements required to deliver the Renewable Energy committed to Purchaser hereunder to the Point of Delivery pursuant to Section 5.3, including the Interconnection Agreement
- (3) Seller's failure to comply with any material obligation under this REPA, other than as expressly specified in this Article 12, which would result in a material adverse impact on Purchaser

- (4) Seller's assignment of this REPA, or Seller's sale or transfer of its interest, or any part thereof, in the Facility, except as permitted in accordance with Article 19; or
- (5) Any representation or warranty made by Seller in this REPA shall prove to have been false in any material respect when made, except to the extent expressly limited to the time when made, if such cessation would reasonably be expected to result in a material adverse impact on Purchaser
- Commercial Operation Milestone shall constitute an Event of Default of Seller if not after the date of written notice from Purchaser to Seller and the Facility Financing Representative as provided for in Section 13.1; provided, however, that Seller shall have an additional ninety (90) Day period to achieve the Commercial Operation Date, provided that, on or before the expiration of the initial ninety (90) Day period, an independent engineer, mutually agreed to by the Parties, retained by Purchaser and paid for by Seller, provides a written opinion to Purchaser stating that Seller's plan for achieving the Commercial Operation Date is reasonably achievable within such additional ninety (90) Day cure period. This provision would allow for a fall conditions of this paragraph are met. Delay Liquidated Damages under Section 4.10 shall continue accruing until the occurrence of one of the following events: (i) the Commercial Operation Date is achieved, or (ii) this REPA is terminated.

### 12.2 Facility Financiers' Right to Cure Default of Seller.

Seller shall provide Purchaser with a notice identifying the Facility Financing Representative. If requested by Seller, (i) in connection with any permitted collateral assignment pursuant to Section 19.1(B), Purchaser shall execute a Consent and Agreement in substantially the form of Exhibit N-1 or (ii) Purchaser shall execute a Consent and Agreement in substantially the form of Exhibit N-2 in favor of any Facility Financiers that do not receive a collateral assignment of this REPA, but Purchaser shall not be required to execute or maintain more than one of such Consent and Agreements at any time. In the case of execution of any Consent and Agreement, Purchaser shall deliver to such Facility Financing Representative and Seller an opinion of in-house counsel reasonably acceptable to such Facility Financing Representative limited to enforceability, non-contravention and corporate housekeeping matters. Following execution of a Consent and Agreement, Purchaser shall provide notice of any default of Seller under Section 12.1 to the Facility Financing Representative, and Purchaser will accept a cure to such Default of Seller performed by the Facility Financing Representative, in accordance with the terms of the applicable Consent and Agreement.

#### 12.3 Events of Default of Purchaser.

- (A) Any of the following shall constitute an "Event of Default" of Purchaser upon its occurrence and no cure period shall be applicable:
  - (1) Purchaser's dissolution or liquidation;
- (2) Purchaser's assignment of any of its rights hereunder for the benefit of creditors:
- (3) Purchaser's voluntary filing of a petition in bankruptcy or insolvency or for reorganization or arrangement under the bankruptcy laws of the United States or under any insolvency act of any State, or Purchaser voluntarily taking advantage of any such law or act by answer or otherwise;
- (4) The filing of a case in bankruptcy or any proceeding under any other insolvency law against Purchaser and such case or proceeding is not dismissed within sixty (60) Days;
- (5) Purchaser's assignment of this REPA, except as permitted in accordance with Article 19; or
- (6) An Event of Default with respect to Purchaser occurs under the RECPA.
- (B) Purchaser's failure to comply with its obligations under Section 11.2 shall constitute an Event of Default of Purchaser if not cured within five (5) Business Days after the date of written notice from Seller to Purchaser;

- (C) Purchaser's failure to make any payment due hereunder (net of outstanding damages and any other rights of offset that Purchaser may have pursuant to this REPA) shall constitute an Event of Default of Purchaser if not cured within ten (10) Days after the date of written notice from Seller to Purchaser as provided for in Section 13.1.
- (D) Purchaser's failure to comply with any material obligation under this REPA, other than as otherwise expressly specified in this Article 12, which would result in a material adverse impact on Seller, shall constitute an Event of Default of Purchaser if not cured within thirty (30) Days after the date of written notice from Seller to Purchaser as provided for in Section 13.1.
- (E) Any representation or warranty made by Purchaser in this REPA shall prove to have been false in any material respect when made, except to the extent expressly limited to the time when made, or ceases to remain true during the Term if such cessation would reasonably be expected to result in a material adverse impact on Seller, and shall constitute an Event of Default of Purchaser if not cured within thirty (30) Days after the date of written notice from Seller to Purchaser as provided for in Section 13.1.

#### 12.4 <u>Damages Prior to Termination</u>.

For all breaches or Events of Default (other than those in respect of any delay of the Commercial Operation Date and any Output Shortfall, for which Sections 4.10, 4.11 and 7.2 of REPA provide a remedy that is stated to be an exclusive remedy of Purchaser), the non-breaching or non-defaulting Party shall be entitled to receive from the breaching or defaulting Party its actual, direct damages resulting from such breach or Event of Default.

#### 12.5 <u>Termination</u>.

Upon the occurrence of an Event of Default which has not been cured within the applicable cure period and is continuing, the non-defaulting Party shall have the right to declare, by giving notice to the defaulting Party (and, if the defaulting Party is Seller, to the Facility Financing Representative), a date no less than one (1) Day and no more than thirty (30) Days after the date of such notice upon which this REPA shall terminate. Neither Party shall have the right to terminate this REPA except as provided for upon the occurrence of an Event of Default as described above or as otherwise may be explicitly provided for in this REPA. Except in the event of termination by Purchaser in the case of the Event of Default of Seller in Section 12.1(E), the non-defaulting Party shall be entitled to receive from the defaulting Party, all of the actual damages incurred by the non-defaulting Party as a result of such termination, including the Replacement Energy Costs or Resale Costs (if any) incurred by the non-defaulting Party as a result of the termination of this REPA. In the event of termination by Purchaser in the case of the Event of Default of Seller in Section 12.1(E), neither Party shall have any liability arising out of such termination, without prejudice to Seller's obligation to pay Delay Liquidated Damages in respect of the period prior to such termination.

#### 12.6 Specific Performance.

In addition to the other remedies specified in this <u>Article 12</u>, in the event that any breach of this REPA by a Party is not cured within the applicable cure period set forth herein, the other Party shall have the right to specific performance.

#### 12.7 Remedies Cumulative.

Subject to the exclusivity of Delay Liquidated Damages provided in Section 4.10, the Deficiency Liquidated Damages provided in Section 5.2 and the limitations on damages set forth in Sections 12.4 and 12.8, each right or remedy of the Parties provided for in this REPA shall be cumulative of and shall be in addition to every other right or remedy provided for in this REPA, at law or in equity, and the exercise, or the beginning of the exercise, by a Party of any one or more or the rights or remedies provided for herein shall not preclude the simultaneous or later exercise by such Party of any or all other rights or remedies provided for herein.

#### 12.8 Waiver and Exclusion of Other Damages.

- The Parties confirm that the express remedies and measures of damages provided in this REPA satisfy the essential purposes hereof. If no remedy or measure of damages is expressly herein provided, the obligor's liability shall be limited to direct, actual damages only. NEITHER PARTY SHALL BE LIABLE TO THE OTHER PARTY FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY, SPECIAL OR INDIRECT DAMAGES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES BY STATUTE, IN TORT OR CONTRACT (EXCEPT TO THE EXTENT EXPRESSLY PROVIDED HEREIN), PROVIDED, THAT IF EITHER PARTY IS HELD LIABLE TO A THIRD PARTY FOR SUCH DAMAGES AND THE PARTY HELD LIABLE FOR SUCH DAMAGES IS ENTITLED TO INDEMNIFICATION THEREFORE FROM THE OTHER PARTY HERETO. THE INDEMNIFYING PARTY SHALL BE LIABLE FOR, AND OBLIGATED TO REIMBURSE THE INDEMNIFIED PARTY FOR, SUCH DAMAGES. To the extent any damages required to be paid hereunder are liquidated, the Parties acknowledge that the damages are difficult or impossible to determine, that otherwise obtaining an adequate remedy is inconvenient, and that the liquidated damages constitute a reasonable approximation of the harm or loss.
- (B) THE PARTIES INTEND THAT, EXCEPT AS OTHERWISE EXPRESSLY PROVIDED, THE INDEMNITIES AND OTHER RELEASES, WAIVERS, ALLOCATIONS AND DISCLAIMERS OF, AND LIMITATIONS ON, LIABILITIES OR REMEDIES SET FORTH IN THIS REPA SHALL APPLY EVEN IN THE EVENT OF THE FAULT, NEGLIGENCE (INCLUDING GROSS NEGLIGENCE) (IN WHOLE OR IN PART), STRICT LIABILITY, OR BREACH OF CONTRACT OF THE BENEFICIARY THEREOF AND WHETHER ASSERTED IN CONTRACT, IN WARRANTY, IN TORT, BY STATUTE OR OTHERWISE.

(C) PURCHASER ACKNOWLEDGES AND AGREES THAT IT HAS ENTERED INTO THIS REPA AND IS CONTRACTING TO RECEIVE CAPACITY, RENEWABLE ENERGY, ANCILLARY SERVICES, RECS, OTHER BENEFICIAL ENVIRONMENTAL INTERESTS AND OTHER GOODS AND SERVICES BASED SOLELY UPON THE EXPRESS REPRESENTATIONS AND WARRANTIES IN THIS REPA, AND NO IMPLIED WARRANTIES FROM SELLER OR ANY OTHER PERSON SHALL BE DEEMED TO APPLY TO THE SAME. THE PARTIES NEGATE ANY REPRESENTATION OR WARRANTY WITH RESPECT TO THE CAPACITY, RENEWABLE ENERGY, ANCILLARY SERVICES, RECS, OTHER BENEFICIAL ENVIRONMENTAL INTERESTS AND OTHER GOODS AND SERVICES NOT EXPRESSLY SET FORTH IN THIS REPA, INCLUDING ANY REPRESENTATION OR WARRANTY WITH RESPECT TO MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

#### 12.9 Payment of Damages.

Without limiting any other provisions of this Article 12 and at any time before or after termination of this REPA, the non-defaulting Party may send the other Party an invoice for such damages (including, if applicable, Delay Liquidated Damages, Deficiency Liquidated Damages and Shortfall Liquidated Damages) or other amounts as are due to the non-defaulting Party at such time from the defaulting Party under this REPA and such invoice shall be payable in the manner, and in accordance with the applicable provisions, set forth in Article 9, including the provision for late payment charges. In the case of damages owed by Seiler to Purchaser, Purchaser may, subject to the provisions of Section 11.1, withdraw funds from the Security Fund, as needed to provide payment for such invoice if the invoice is not paid by Seller on or before the tenth (10th) Business Day following the invoice due date.

#### 12.10 <u>Duty to Mitigate</u>.

Each Party agrees that it has a duty to mitigate damages and covenants that it will use commercially reasonable efforts to minimize any damages it may incur as a result of the other Party's performance or non-performance of the REPA.

# ARTICLE 13 CONTRACT ADMINISTRATION AND NOTICES

#### 13.1 Notices in Writing.

Notices required by this REPA shall be addressed to the other Party, including the other Party's representative on the Contract Administration Committee, at the addresses noted in Exhibit D as either Party updates them from time to time by written notice to the other Party. Any notice, request, consent, or other communication required or authorized under this REPA to be given by one Party to the other Party shall be in writing. It shall either be hand delivered or mailed, postage prepaid, to the representative of said other Party. If mailed, the notice, request, consent or other communication shall be simultaneously sent by facsimile or other electronic means.

Any such notice, request, consent, or other communication shall be deemed to have been received by the Close of the Business Day on which it was hand delivered or transmitted electronically (unless hand delivered or transmitted after such close in which case it shall be deemed received at the close of the next Business Day). Real-time or routine communications concerning Facility operations shall be exempt from this Section.

#### 13.2 Representative for Notices.

Each Party shall maintain a designated representative to receive notices. Such representative may, at the option of each Party, be the same person as that Party's representative or alternate representative on the Contract Administration Committee, or a different person. Either Party may, by written notice to the other Party, change the representative or the address to which such notices and communications are to be sent.

#### 13.3 Authority of Representatives.

The Parties' representatives designated above shall have authority to act for its respective principals in all technical matters relating to performance of this REPA and to attempt to resolve disputes or potential disputes. However, they, in their capacity as representatives, shall not have the authority to amend or modify any provision of this REPA.

#### 13.4 Operating Records.

Seller and Purchaser shall each keep complete and accurate records and all other data required by each of them for the purposes of proper administration of this REPA, including such records as may be required by state or federal regulatory authorities and the Transmission Operator in the prescribed format.

#### 13.5 Operating Log.

Seller shall maintain an accurate and up-to-date operating log, in electronic format, at the Facility with records of production for each Clock Hour; changes in operating status; Scheduled Outages/Deratings and Forced Outages for the purposes of proper administration of this REPA, including such records as may be required by state or federal regulatory authorities and the Transmission Operator in the prescribed format.

#### 13.6 <u>Billing and Payment Records</u>.

To facilitate payment and verification, Seller and Purchaser shall keep all books and records necessary for billing and payments in accordance with the provisions of Article 9 and grant the other Party reasonable access to those records. All records of Seller pertaining to the operation of a Facility shall be maintained on the premises of the Facility or at the notice address listed in Exhibit D. For audit and verification purposes, Seller will grant Purchaser read-only access to the PJM eSuite accounts for the node associated with the PJM charges and credits for the Renewable Energy Products from Purchaser's Contract Capacity Share of the Facility Capacity.

#### 13.7 Examination of Records.

Seller and Purchaser may examine the financial and Operating Records and data kept by the other Party relating to transactions under and administration of this REPA, at any time during the period the records are required to be maintained, upon request and during normal business hours.

#### 13.8 Exhibits.

Either Party may change the information for their notice addresses in Exhibit D at any time upon written notice to but without the approval of the other Party. Exhibit C may only be changed in accordance with Section 20.4. Exhibit E may be changed in accordance with Section 16.2(B). All other Exhibits may only be modified by the mutual agreement of Seller and Purchaser.

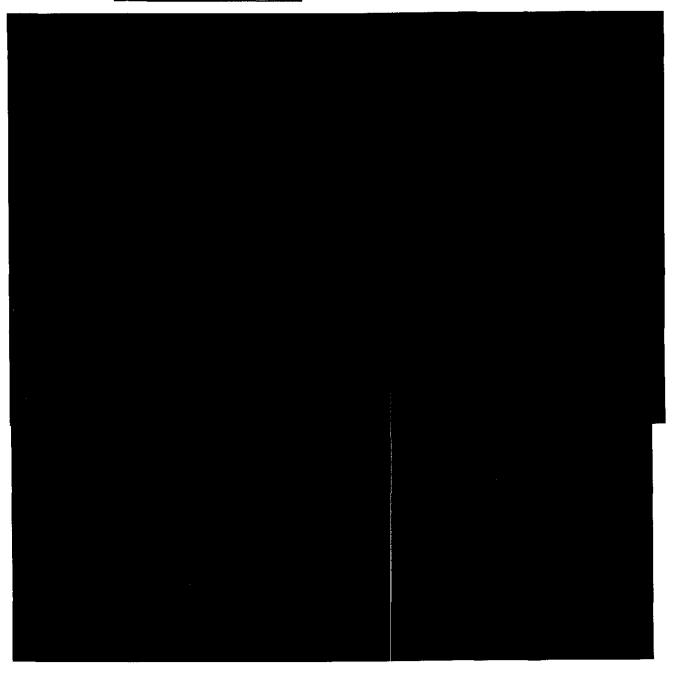
#### 13.9 <u>Dispute Resolution</u>.

- in the event of any dispute, controversy or claim arising out of or (A)relating to this REPA (a "Dispute"), within ten (10) Days following the delivered date of a written request by either Party (a "Dispute Notice"), (i) each Party shall appoint a representative (Individually, a "Party Representative", together, the Representatives"), and (ii) the Parties' Representatives shall meet, negotiate and attempt in good faith to resolve the Dispute quickly, informally and inexpensively. In the event the Parties' Representatives have not resolved the Dispute within thirty (30) Days after commencement of negotiations, within ten (10) Days following any request by either Party at any time thereafter, each Party Representative (I) shall independently prepare a written summary of the Dispute describing the issues and claims. (II) shall exchange its summary with the summary of the Dispute prepared by the other Party Representative, and (III) shall submit a copy of both summaries to a senior officer of the Party Representative's Party with authority to irrevocably bind the Party to a resolution of the Dispute. Within ten (10) Business Days after receipt of the Dispute summaries, the senior officers for both Parties shall negotiate in good faith to resolve the Dispute. If the Parties have not resolved the Dispute within fourteen (14) Days following receipt of the Dispute summaries by the senior officers, either Party may seek available legal and equitable remedies.
- (B) Notwithstanding any provision in this REPA to the contrary, if no Dispute Notice has been issued within twenty-four (24) months following the occurrence of all events and the existence of all circumstances giving rise to the Dispute (regardless of the knowledge or potential knowledge of either Party of such events and circumstances), the Dispute and all claims related thereto shall be deemed waived and the aggrieved Party shall thereafter be barred from proceeding thereon; provided, however, that the limitation set forth in this subsection (B) shall not apply to any Dispute Notices regarding claims for indemnification under this REPA for third party claims.
- (C) Seller and Purchaser each hereby knowingly, voluntarily and intentionally waive any rights they may have to a trial by jury in respect of any litigation

based hereon, or arising out of, under, or in connection with, this REPA or any course of conduct, course of dealing, statements (whether oral or written) or actions of Seller and Purchaser related hereto and expressly agree to have any disputes arising under or in connection with this REPA be adjudicated by a judge of the court having jurisdiction without a jury.

#### ARTICLE 14 FORCE MAJEURE

#### 14.1 <u>Definition of Force Majeure</u>.



#### 14.2 Applicability of Force Majeure.

- (A) Other than as set forth in Section 14.3, neither Party shall be responsible or liable for any delay or failure in its performance under this REPA (other than the obligation to make payment of amounts due and payable under this REPA), nor shall any delay, failure, or other occurrence or event become an Event of Default, to the extent such delay, failure, occurrence or event is substantially caused by conditions or events of Force Majeure, provided that:
- (1) the non-performing Party gives the other Party prompt written notice describing the particulars of the occurrence of the Force Majeure;
- (2) the suspension of performance is of no greater scope and of no longer duration than is required by the Force Majeure;
- (3) the non-performing Party proceeds with reasonable diligence to remedy its inability to perform and provides weekly progress reports to the other Party describing actions taken to end the Force Majeure; and
- (4) when the non-performing Party is able to resume performance of its obligations under this REPA, that Party shall give the other Party prompt written notice to that effect.
- (B) Except as otherwise expressly provided for in this REPA, the existence of a condition or event of Force Majeure shall not relieve the Parties of their obligations under this REPA (including payment obligations) to the extent that performance of such obligations is not precluded by the condition or event of Force Majeure.

#### 14.3 Limitations on Effect of Force Majeure.

In no event will any delay or failure of performance caused by any conditions or events of Force Majeure extend this REPA beyond its stated Term. In the event that any delay or failure of performance caused by conditions or events of Force Majeure prevents the performance of a Party's obligations hereunder in any material respect and continues for an uninterrupted period of three hundred sixty-five (365) Days from its occurrence or inception, as noticed pursuant to Section 14.2(A), either Party may, at any time following the end of such three hundred sixty-five (365) Day period, terminate this REPA upon written notice to the other Party, without further obligation by either Party except as to costs and balances incurred prior to the effective date of such termination

# ARTICLE 15 REPRESENTATIONS, WARRANTIES AND COVENANTS

### 15.1 Seller's Representations, Warranties and Covenants.

Seller hereby represents and warrants as follows:

- (A) Seller is a limited liability company duty organized, validly existing and in good standing under the laws of the State of Delaware. Seller is qualified to do business in each other jurisdiction where the failure to so qualify would have a material adverse effect on the business or financial condition of Seller; and Seller has all requisite power and authority to conduct its business, to own its assets, and to execute, deliver, and perform its obligations under this REPA.
- (B) The execution, delivery, and performance of its obligations under this REPA by Seller have been duly authorized by all necessary limited liability company action, and do not and will not:
- (1) require any consent or approval by any governing body of Seller, other than that which has been obtained and is in full force and effect (evidence of which shall be delivered to Purchaser upon its request);
- (2) (violate any provision of law, rule, regulation, order, writ, judgment, injunction, decree, determination, or award currently in effect having applicability to Seller or violate any provision in any formation documents of Seller, the violation of which could have a material adverse effect on the ability of Seller to perform its obligations under this REPA;
- (3) result in a breach or constitute a default under Seller's formation documents or bylaws, or under any agreement relating to the management or affairs of Seller or any indenture or loan or credit agreement, or any other agreement, lease, or instrument to which Seller is a party or by which Seller or its assets may be bound or affected, the breach or default of which could reasonably be expected to have a material adverse effect on the ability of Seller to perform its obligations under this REPA; or
- (4) result in, or require the creation or imposition of any mortgage, deed of trust, pledge, lien, security interest, or other charge or encumbrance of any nature (other than as may be contemplated by this REPA) upon or with respect to any of the assets of Seller now owned or hereafter acquired, the creation or imposition of which could reasonably be expected to have a material adverse effect on the ability of Seller to perform its obligations under this REPA.
- (C) This REPA is a valid and binding obligation of Seller, except as enforceability of this REPA may be limited by (i) bankruptcy, insolvency, reorganization or other similar laws affecting the enforcement of creditors' rights generally and (ii) general principles of equity whether considered in a proceeding in equity or at law.
- (D) The execution and performance of this REPA will not conflict with or constitute a breach or default under any contract or agreement of any kind to which Seller is a party or any judgment, order, statute, or regulation that is applicable to Seller or the Facility, the conflict with, or breach or default of, which could reasonably be

expected to have a material adverse effect on the ability of Seiler to perform its obligations under this REPA.

- (E) To the best knowledge of Seller, and except for those permits, consents, approvals, licenses and authorizations which Seller anticipates will be obtained by Seller in the ordinary course of business, all permits, consents, approvals, licenses, authorizations, or other action required by any Governmental Authority to authorize Seller's execution, delivery and performance of this REPA have been duly obtained and are in full force and effect.
- (F) Seller shall comply with all applicable local, state, and federal laws, regulations, and ordinances, including applicable equal opportunity and affirmative action requirements and all applicable federal, state, and local environmental laws and regulations presently in effect or which may be enacted during the Term of this REPA.
- (G) Seller shall disclose to Purchaser, the extent of, and as soon as it is known to Seller, any violation of any environmental laws or regulations arising out of the construction or operation of the Facility, or the presence of Environmental Contamination at the Facility or on the Site, alleged to exist by any Governmental Authority having jurisdiction over the Site, or the existence of any past or present enforcement, legal, or regulatory action or proceeding relating to such alleged violation or alleged presence of Environmental Contamination.

#### 15.2 Purchaser's Representations, Warranties and Covenants.

Purchaser hereby represents and warrants as follows:

- (A) Purchaser is a corporation duly organized, validly existing and in good standing under the laws of the State of Ohio and is qualified to do business in each other jurisdiction where the failure to so qualify would have a material adverse effect upon the business or financial condition of Purchaser; and Purchaser has all requisite power and authority to conduct its business, to own its properties, and to execute, deliver, and perform its obligations under this REPA.
- (B) The execution, delivery, and performance of its obligations under this REPA by Purchaser have been duly authorized by all necessary corporate action, and do not and will not:
- (1) require any consent or approval of Purchaser's Board of Directors, or shareholders, other than that which has been obtained and is in full force and effect (evidence of which shall be delivered to Seller upon its request);
- (2) violate any provision of law, rule, regulation, order, writ, judgment, injunction, decree, determination, or award currently in effect having applicability to Purchaser or violate any provision in any corporate documents of Purchaser, the violation of which could have a material adverse effect on the ability of Purchaser to perform its obligations under this REPA;

- (3) result in a breach or constitute a default under Purchaser's corporate charter or bylaws, or under any agreement relating to the management or affairs of Purchaser, or any indenture or loan or credit agreement, or any other agreement, lease, or instrument to which Purchaser is a party or by which Purchaser or its properties or assets may be bound or affected, the breach or default of which could reasonably be expected to have a material adverse effect on the ability of Purchaser to perform its obligations under this REPA; or
- (4) result in, or require the creation or imposition of, any mortgage, deed of trust, pledge, lien, security interest, or other charge or encumbrance of any nature (other than as may be contemplated by this REPA) upon or with respect to any of the assets or properties of Purchaser now owned or hereafter acquired, the creation or imposition of which could reasonably be expected to have a material adverse effect on the ability of Purchaser to perform its obligations under this REPA.
- (C) This REPA is a valid and binding obligation of Purchaser except as enforceability of this REPA may be limited by (i) bankruptcy, insolvency, reorganization or other similar laws affecting the enforcement of creditors' rights generally and (ii) general principles of equity whether considered in a proceeding in equity or at law.
- (D) The execution and performance of this REPA will not conflict with or constitute a breach or default under any contract or agreement of any kind to which Purchaser is a party or any judgment, order, statute, or regulation that is applicable to Purchaser, the conflict with, or breach or default of, which could reasonably be expected to have a material adverse effect on the ability of Purchaser to perform its obligations under this REPA.
- (E) To the best knowledge of Purchaser, and except for the conditions precedent described in Section 6.1, all approvals, authorizations, consents, or other action required by any Governmental Authority to authorize Purchaser's execution, delivery and performance of this REPA, have been duly obtained and are in full force and effect.
- (F) Purchaser is acquiring the Renewable Energy Products (other than the RECs) from the Facility for resale purposes, will re-sell all such products acquired hereunder and is not and will not be an end user of such products.

# ARTICLE 16 INSURANCE

#### 16.1 Evidence of Insurance.

Seller shall, promptly upon renewal of insurance each calendar year or partial calendar year during the Term, provide Purchaser, at the insurance address listed in Exhibit D, with a copy of insurance certificates acceptable to Purchaser evidencing that insurance coverages for the Facility are in compliance with the specifications for insurance coverage set forth in Exhibit E to this REPA. Such certificates shall (a) name Purchaser as an additional insured (except workers'

compensation); (b) provide a waiver of any rights of subrogation against Purchaser, its Affiliates and their officers, directors, agents, subcontractors, and employees; and (c) indicate that the Commercial General Liability policy has been endorsed as described above. Seller shall use commercially reasonable efforts to procure that the insurance policies required by this REPA provide that Purchaser shall receive thirty (30) Days prior written notice of non-renewal, cancellation of, or significant modification to any of the corresponding policies (except that such notice shall be ten (10) Days for non-payment of premiums); provided, however, that, if Seller is unable to require its insurers to provide such notices to Purchaser, Seller shall provide Purchaser, at the insurance address listed in Exhibit D; with any such notice of non-renewal or cancellation to any corresponding policy which Seller receives from any of its insurers as soon as practicable following Seller's receipt of such notice but in no event later than five (5) Business Days following Seller's receipt, if any, of the relevant notice. All policies shall be written with insurers that Purchaser, in its reasonable discretion, deems acceptable (such acceptance will not be unreasonably withheld, conditioned or delayed). All policies shall contain an endorsement that Seller's policy shall be primary in all instances regardless of like coverages, if any, carried by Purchaser. Seller's liability under this REPA is not limited to the amount of insurance coverage required herein.

#### 16.2 Term and Modification of Insurance.

All insurance required under this REPA shall be on an occurrence-basis and shall be in effect during the Term and for a period of two (2) years after the Term. In the event that any insurance as required herein is commercially available only on a "claims-made" basis, such insurance shall provide for a retroactive date not later than the date of this REPA and such insurance shall be maintained by Seller, with a retroactive date not later than the retroactive date required above, for a minimum of five (5) years after the Term. If any insurance required to be maintained by Seller hereunder ceases to be reasonably available and commercially feasible in the commercial insurance market, Seller shall provide written notice to Purchaser, accompanied by a certificate from an independent insurance advisor of recognized national standing, certifying that such insurance is not reasonably available and commercially feasible in the commercial insurance market for electric generating plants of similar type, geographic location and design. Upon receipt of such notice. Seller shall use commercially reasonable efforts to obtain other insurance that would provide comparable protection against the risk to be insured and Purchaser shall not unreasonably withhold its consent to modify or waive such requirement

# ARTICLE 17 INDEMNITY

17.1 <u>Indemnity Obligations.</u> Each Party (the "Indemnifying Party") agrees to indemnify, defend and hold harmless the other Party (the "Indemnified Party") from and against all claims, demands, losses, liabilities, penalties and expenses (including reasonable attorneys' fees) for personal injury or death to persons and damage to the Indemnified Party's real property and tangible personal property or facilities or the property of any other person or entity to the extent arising out of, resulting from, or

caused by an Event of Default under this REPA, violation of any applicable environmental laws, or by the negligent or tortious acts, errors, or omissions of the Indemnifying Party, its Affiliates, its directors, officers, employees, or agents; provided, however, that notwithstanding the foregoing, each Party shall be responsible for injury or death to such Party's employees, agents and representatives on the Site or in connection with visits thereto or inspections thereof, except to the extent any such injury or death arises from the gross negligence or willful misconduct of the other Party. Nothing in this Section shall enlarge or relieve Seller or Purchaser of any liability to the other for any breach of this REPA. Subject to the foregoing and the next sentence, this indemnification obligation shall apply notwithstanding any negligent or intentional acts, errors or omissions of the Indemnified Party, but the Indemnifying Party's liability to pay damages to the Indemnified Party shall be reduced in proportion to the percentage by which the Indemnified Party's negligent or intentional acts, errors or omissions caused the damages. Neither Party shall be indemnified for its damages resulting from its sole negligence, intentional acts or willful misconduct. These indemnity provisions shall not be construed to relieve any insurer of its obligation to pay claims consistent with the provisions of a valid insurance policy.

- 17.2 Notification of Claims; Defense. Promptly after receipt by a Party of any claim or notice of the commencement of any action, administrative, or legal proceeding, or investigation as to which the indemnity provided for in this Article may apply, the Indemnified Party shall notify the Indemnifying Party in writing of such fact. The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Party and reasonably satisfactory to the Indemnified Party, provided, however, that if the defendants in any such action include both the Indemnified Party and the Indemnifying Party and the Indemnified Party shall have reasonably concluded that there may be legal defenses available to it which are different from or additional to, or inconsistent with, those available to the Indemnifying Party, the Indemnified Party shall have the right to select and be represented by separate counsel, at the Indemnifying Party's expense, unless a liability insurer is willing to pay such costs; provided further that the Indemnifying Party may settle the claim only if the compromise or settlement includes an unconditional release of the Indemnified Person from all liabilities other than the payment of any money that will be paid by the Indemnifying Party.
- 17.3 <u>Failure to Defend.</u> If the Indemnifying Party fails to assume the defense of a claim meriting indemnification, the Indemnified Party may at the expense of the Indemnifying Party contest, settle, or pay such claim, provided that settlement or full payment of any such claim may be made only following consent of the Indemnifying Party or, absent such consent, written opinion of the Indemnified Party's counsel that such claim is meritorious or warrants settlement.
- 17.4 Net of Insurance Proceeds, Except as otherwise provided in this Article, in the event that a Party is obligated to indemnify and hold the other Party and its successors and assigns harmless under this Article 17, the amount owing to the Indemnified Party will be the amount of the Indemnified Party's actual loss net of any

insurance proceeds received by the Indemnified Party following a reasonable effort by the Indemnified Party to obtain such insurance proceeds.

# ARTICLE 18 LEGAL AND REGULATORY COMPLIANCE

- 18.1 <u>Compliance with Laws.</u> Each Party shall at all times comply with all laws, ordinances, rules and regulations applicable to it except for any non-compliance which, individually or in the aggregate, could not reasonably be expected to have a material effect on the business or financial condition of the Party or its ability to fulfill its commitments hereunder. As applicable, each Party shall give all required notices, shall procure and maintain all permits, licenses, and inspections required by any Governmental Authority and necessary for performance of this REPA, and shall pay its respective charges and fees in connection therewith.
- 18.2 <u>Cooperation.</u> Each Party shall cooperate with the other Party in providing such information as may be reasonably requested, to the extent permitted by applicable law and subject to such confidentiality and use limitations as the providing Party may reasonably require, to the extent that the requesting Party requires the same in order to fulfill any regulatory reporting requirements, or to assist the requesting Party in litigation, including administrative proceedings before utility regulatory commissions.
- 18.3 <u>Removal of Facility.</u> Upon permanent cessation of generation of Renewable Energy from the Facility, Selter shall decommission the Facility, remove the Facility and remediate the Site as, if and when required by law.

# ARTICLE 19 ASSIGNMENT, SUBCONTRACTING, AND FINANCING

## 19.1 No Assignment Without Consent.

Except as permitted in this Article 19, neither Party shall assign this REPA or any portion thereof, without the prior written consent of the other Party, which consent shall not be unreasonably withheld or delayed; provided (i) at least thirty (30) Days prior notice of any such assignment shall be given to the other Party; (ii) any assignee shall expressly assume the assignor's obligations hereunder, unless otherwise agreed to by the other Party, and no assignment, whether or not consented to, shall relieve the assignor of its obligations hereunder in the event the assignee fails to perform, unless the other Party agrees in writing in advance to waive the assignor's continuing obligations pursuant to this REPA; (iii) no such assignment shall impair any security given by Seller hereunder; and (iv) before the REPA is assigned by Seller, the assignee must first obtain such approvals as may be required by all applicable regulatory bodies. For the avoidance of doubt, a merger of either Party with another Person shall not qualify as an assignment and shall not be subject to the restrictions set forth in this Section 19.1.

(A) Seiler's consent shall not be required for Purchaser to assign this REPA to an Affiliate of Purchaser, provided that Purchaser provides assurances and

executes documents reasonably required by Seller and the Facility Financiers regarding Purchaser's continued liability for all of Purchaser's obligations under this REPA in the event of any nonperformance on the part of such assignee and that such assignee is a Creditworthy Entity. In the event that the assignee has or obtains an investment grade senior unsecured debt rating equivalent to or better than the senior unsecured debt rating of Purchaser (but in no event worse than the equivalent of BBB), then Seller agrees to relieve Purchaser from its obligations under this REPA if Purchaser requests to be so relieved in a written notice provided to Seller.

(B) Seller shall have the right, without Purchaser's prior written consent, to assign this REPA (i) subject to the provisions of Section 19.2, to a purchaser of all or substantially all of the assets of Seller; (ii) to an Affiliate of Seller; (iii) subject to the provisions of Section 19.2, in connection with a merger of Seller with another Person or any other transaction resulting in a direct or indirect change of control of Seller, or (iv) for collateral purposes to the Facility Financing Representative or any Facility Financier provided that the Parties and the Facility Financing Representative have executed the applicable Consent and Agreement; and in any event provided that such purchaser, Affiliate or the Person surviving such merger, as applicable, (x) meets the requirements of this Section 19.1, (y) complies with the requirements of Section 11.1, and (z) is a Qualified Operator.

#### 19.2 Right of First Offer

- (A) Provided that no Event of Default by Purchaser is continuing, Seller (or any direct or indirect parent of Seller) shall not sell or transfer all of the Facility (or all of its direct or indirect equity interests in Seller or any portion thereof in excess of the ratio that the Uncommitted Capacity bears to the Facility Capacity), unless prior to such sale or transfer, Seller provides written notice of such sale or transfer to Purchaser. Such notice may, but is not required to, contain a description of the price and other terms upon which Seller (or any direct or indirect parent of Seller) desires to sell or transfer such interest in the Facility (or direct or indirect equity interests in Seller). If Purchaser desires to enter into negotiations with Seller regarding the sale or transfer of the interest(s) that are the subject of the notice, Purchaser shall notify Seller of such decision within fifteen (15) days of receipt of Seller's notice. Upon Seller's receipt of such notice, Purchaser and Seller shall negotiate in good faith, on an exclusive basis for no more than sixty (60) days (unless a longer period is otherwise mutually agreed to), the terms of the sale or transfer of the Facility (or direct or indirect equity interests in Seller) to Purchaser or any Affiliate of Purchaser. Seller will provide in a timely manner, information regarding the Facility (and, if applicable, direct or indirect equity interests in Seller) which is reasonable or customary to allow Purchaser to perform due diligence and to negotiate in good faith for the purchase of the Facility (or direct or indirect equity interests in Seller).
- (B) In the event that Purchaser does not exercise its right to negotiate pursuant to Section 19.2(A), Seller must comply with Section 19.1 in any assignment of Seller's rights, interests or obligations herein to a purchaser of the Facility.

- (C) In the event that Seller (or any direct or indirect parent of Seller) does not consummate the sale or transfer of the interests offered to Purchaser in accordance with Section 19.2(A) within one hundred eighty (180) Days of the date that is the later of (i) Purchaser's declining to enter into negotiations with Seller after Seller's notice pursuant to Section 19.2(A), or (ii) the end of the exclusive negotiation period between Seller and Purchaser pursuant to Section 19.2(A), Seller (or any direct or indirect parent of Seller) shall not sell or transfer all of the Facility (or all of its direct or indirect equity interests in Seller or any portion thereof in excess of the ratio that the Uncommitted Capacity bears to the Facility Capacity), unless prior to such sale or transfer it complies with the provisions of Section 19.2(A).
- (D) The provisions of this Section 19.2 shall terminate upon termination of this Agreement by Seller or upon the assignment of this REPA by Purchaser to any Person other than an Affiliate of Purchaser.

#### 19.3 Accommodation of Facility Financiers.

To facilitate Seller's obtaining of financing with respect to the Facility, Purchaser shall make reasonable efforts to enter into the applicable Consent and Agreement, and to provide such other certifications, representations or other documents as may be reasonably requested by Seller or the Facility Financing Representative; provided, that in responding to any such request, Purchaser shall have no obligation to enter into any agreement that materially adversely affects any of Purchaser's rights, benefits, risks or obligations under this REPA. Seller shall reimburse, or shall cause the Facility Financing Representative to reimburse, Purchaser for the incremental amount of direct expenses (including the reasonable fees and expenses of counsel) incurred by Purchaser in the preparation, negotiation, execution and delivery of the applicable Consent and Agreement and any other documents requested by Seller or the Facility Financiers, and provided by Purchaser, pursuant to this Section 19.3.

#### 19.4 Notice of Facility Financier Action.

Within ten (10) Days following Seller's receipt of each written notice from the Facility Financiers of default, or Facility Financiers' intent to exercise any remedies, under the Financing Documents, Seller shall deliver a copy of such notice to Purchaser.

#### 19.5 Transfer Without Consent is Null and Void.

Any sale, transfer, or assignment of any interest in the Facility or in this REPA made without fulfilling the requirements of the REPA shall be null and void and shall constitute an Event of Default pursuant to Article 12.

#### 19.6 Subcontracting.

Seller may subcontract its duties or obligations under this REPA without the prior written consent of Purchaser, provided, that no such subcontract shall relieve Seller of any of its duties or obligations hereunder.

# ARTICLE 20 MISCELLANEOUS

#### 20.1 Walver.

Subject to the provisions of Section 13.9(B), the failure of either Party to enforce or insist upon compliance with or strict performance of any of the terms or conditions of this REPA, or to take advantage of any of its rights there under, shall not constitute a waiver or relinquishment of any such terms, conditions, or rights, but the same shall be and remain at all times in full force and effect.

#### 20.2 Taxes.

- (A) Each Party shall use reasonable efforts to implement the provisions of and to administer this REPA in accordance with the intent of the Parties to minimize all Taxes, so long as neither Party is materially adversely affected by such efforts. Notwithstanding the foregoing, neither Party shall be obligated to incur any financial burden to reduce taxes for which the other Party is responsible hereunder.
- (B) Seller shall pay or cause to be paid (and shall indemnify and hold Purchaser harmless from and against) all sales, use, excise, ad valorem, transfer and other similar taxes that are imposed by any taxing authority (individually, a "Tax" and collectively, "Taxes") on or with respect to the Facility or the sale of Renewable Energy Products incurred prior to the delivery of Renewable Energy Products to the Point of Delivery. Purchaser shall pay or cause to be paid (and shall indemnify and hold Seller harmless from and against) all Taxes on or with respect to the sale of Renewable Energy Products incurred upon and after the delivery of Renewable Energy Products to the Point of Delivery (other than ad valorem, franchise, income, or commercial activity taxes, and transactional taxes or fees imposed by law on the Seller that are related to the sale of Renewable Energy Products and are, therefore, the responsibility of the Seller). If a Party is required to remit or pay Taxes that are the other Party's responsibility hereunder, the responsible Party shall promptly reimburse the other for such Taxes.
- (C) In the event any of the sales of Renewable Energy Products hereunder are exempt or excluded from any particular Tax(es) payable by Purchaser, Purchaser shall provide Seller with all necessary documentation within thirty (30) days after the execution of this REPA to evidence such exemption or exclusion (or, with regard to any such Tax(es) enacted after the Effective Date, Purchaser shall provide Seller with such documentation before the date on which the enactment requires the delivery of documentation to Seller in order to effect an exclusion or exemption from such Tax(es)). In the event Purchaser does not provide such documentation, then Purchaser shall indemnify, defend and hold Seller harmless from any liability with respect to Tax(es) to which Purchaser is exempt or excluded.

#### 20.3 Fines and Penalties.

- (A) Seller shall pay when due all fees, fines, penalties or costs to the extent incurred by Seller or its agents, employees or contractors for noncompliance by Seller, its employees, or subcontractors with any provision of this REPA, or any contractual obligation, permit or requirements of law except for such fines, penalties and costs that are being actively contested in good faith and with due diligence by Seller and for which adequate financial reserves have been set aside to pay such fines, penalties or costs in the event of an adverse determination.
- (B) If fees, fines, penalties, or costs are claimed or assessed against either Party by any Governmental Authority due to noncompliance by the other Party with this REPA, any requirements of law with which compliance is required by this REPA, any permit or contractual obligation, or, if the work of the other Party or any of its contractors or subcontractors is delayed or stopped by order of any Governmental Authority due to the other Party's noncompliance with any requirements of law with which compliance is required by this REPA, permit, or contractual obligation, penalized Party shall indemnify and hold other Party harmless against any and all reasonable losses, liabilities, damages, and claims suffered or incurred by other Party, including claims for indemnity or contribution made by third parties against other Party, except to the extent other Party recovers any such losses, liabilities or damages through other provisions of this REPA.

#### 20.4 Rate Changes.

The terms and conditions and the rates for service specified in this REPA shall remain in effect for the term of the transaction described herein. Absent the Parties' written agreement, this REPA shall not be subject to change by application of either Party pursuant to Section 205, 206 or 306 of the Federal Power Act.

Absent the agreement of all parties to the proposed change, the standard of review for changes to this REPA whether proposed by a Party, a non-party, or the Federal Energy Regulatory Commission acting sua sponte shall be the "public interest" standard of review set forth in United Gas Pipe Line Co. v. Mobile Gas Service Corp., 350 U.S. 332 (1956) and Federal Power Commission v. Sierra Pacific Power Co., 350 U.S. 348 (1956), as clarified by Morgan Stanley Capital Group, Inc. v. Public Util. Dist. No. 1 of Snohomish, 554 U.S. \_\_\_\_ (2008) (the "Mobile-Sierra doctrine), or such other standard of review permissible to preserve the intent of the parties pursuant to this Section to uphold this REPA without modification.

#### 20.5 Disclaimer of Third Party Beneficiary Rights.

In executing this REPA, neither Party does, nor should it be construed to, extend its credit or financial support for the benefit of any third parties, including those lending money to or having other fransactions with the other Party. Except with respect to applicable Consents and Agreements, nothing in this REPA shall be construed to create any duty to, or standard of care with reference to, or any liability to, any person not a party to this REPA.

## 20.6 Relationship of the Parties.

- (A) This REPA shall not be interpreted to create an association, joint venture, or partnership between the Parties nor to impose any partnership obligation or liability upon either Party nor to create any agency relationship between the Parties or impose any fiduciary responsibility on either Party or create any trust or trust obligations on either Party. Neither Party shall have any right, power, or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as an agent or representative of, the other Party.
- (B) Seller shall be solely liable for the payment of all wages, taxes, and other costs related to the employment of persons to perform its obligations under this REPA, including all federal, state, and local income, social security, payroll, and employment taxes and statutorily mandated workers' compensation coverage. None of the persons employed by Seller shall be considered employees of Purchaser for any purpose; nor shall Seller represent to any person that he or she is or shall become a Purchaser employee.

#### 20.7 Equal Employment Opportunity Compliance Certification.

Seller acknowledges that as a government contractor Purchaser is subject to various federal laws, executive orders, and regulations regarding equal employment opportunity and affirmative action. These laws may also be applicable to Seller as a subcontractor to Purchaser. Seller shall comply with all applicable equal opportunity and affirmative action federal laws, executive orders, and regulations, including, if applicable, 41 C.F.R. §60-1.4(a)(1-7).

#### 20.8 Survival of Obligations.

Cancellation, expiration, or earlier termination of this REPA shall not relieve the Parties of obligations that by their nature should survive such cancellation, expiration, or termination, prior to the term of the applicable statute of limitations, including warranties, remedles, or indemnities, which obligations shall survive for the period of the applicable statute(s) of limitation.

#### 20.9 Severability.

In the event any of the terms, covenants, or conditions of this REPA, its Exhibits, or the application of any such terms, covenants, or conditions, shall be held invalid, illegal, or unenforceable by any court or administrative body having jurisdiction, all other terms, covenants, and conditions of the REPA and their application not adversely affected thereby shall remain in force and effect; provided, however, that Purchaser and Seller shall negotiate in good faith to attempt to implement an equitable adjustment in the provisions of this REPA with a view toward effecting the purposes of this REPA by replacing the provision that is held invalid, illegal, or unenforceable with a valid provision the economic effect of which comes as close as possible to that of the provision that has been found to be invalid, illegal or unenforceable.

#### 20.10 Complete Agreement: Amendments.

The terms and provisions contained in this REPA and the RECPA constitute the entire agreement between Purchaser and Seller with respect to the Facility and shall supersede all previous communications, representations, or agreements, either verbal or written, between Purchaser and Seller with respect to the sale of Renewable Energy Products from and associated with the Facility. This REPA may be amended, changed, modified, or altered, provided that such amendment, change, modification, or alteration shall be in writing and signed by both Parties hereto.

#### 20.11 Binding Effect.

This REPA, as it may be amended from time to time pursuant to this Article, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors-in-interest, legal representatives, and assigns permitted hereunder.

#### 20 12 Headings.

Captions and headings used in this REPA are for ease of reference only and do not constitute a part of this REPA.

#### 20.13 Counterparts

This REPA may be executed in any number of counterparts, and each executed counterpart shall have the same force and effect as an original instrument.

#### 20.14 Governing Law

The interpretation and performance of this REPA and each of its provisions shall be governed and construed in accordance with the laws of the State of New York, without regard to its conflicts of laws provisions.

#### 20.15 Confidentiality.

This REPA and any information provided by either Party to the other Party pursuant to this REPA and labeled "CONFIDENTIAL" or with words of similar meaning will be utilized by the receiving Party solely in connection with the purposes of this REPA and will not be disclosed by the receiving Party to any third party, except with the providing Party's consent, and upon request of the providing Party will be returned thereto, except that the receiving Party will not be obligated to return any such information contained in documents generated by the receiving Party that: (1) reflect or refer to confidential information provided by the disclosing Party; and (2) are stored electronically by the receiving Party. With respect to any such retained electronically stored confidential information, the receiving Party will continue to comply with the obligations of this Section 20.15. Notwithstanding anything herein to the contrary, the Parties acknowledge and agree that such confidential information may be disclosed to (i) the Interconnection Provider, the Transmission Operator, Affiliates or any other

Person (including subcontractors, consultants, accountants, financial advisors, experts, legal counsel and other professional advisors to the Parties) as required for settlement and billing or otherwise to perform under or administer this REPA; and (ii) in case of Seller, to Facility Financiers or potential Facility Financiers, potential bidders and bidders for, and potential purchasers and purchasers of, direct or indirect ownership interests in the Facility (including direct or indirect interests in the equity interests of Seller). To the extent that such disclosures are necessary, the Parties also agree that they will in disclosing such information seek to preserve the confidentiality of such disclosures, by requiring a party receiving confidential information to be bound by the terms of this REPA applicable to such a confidential information. Without limiting the foregoing, this Section 20.15 will not prevent a Party from providing confidential information to any Governmental Authority formally or otherwise, as required in connection with any regulatory proceeding, as required for obtaining any regulator approval or making any regulatory filing, provided that each Party agrees to cooperate with the other to maintain the confidentiality of the provisions of this REPA by requesting confidential treatment with all fillings to the extent appropriate and permitted by applicable law. This provision will not prevent either Party from providing any confidential information received from the other Party to any court or regulatory proceeding or in accordance with a proper discovery request or in response to the reasonable request or need of any Governmental Authority charged with regulating the disclosing Party's affairs or in accordance with the request of any applicable stock exchange, provided that, if feasible, the disclosing Party will give prior notice to the other Party of such disclosure and, if so requested by such other Party, will have used all reasonable efforts to oppose or resist the requested disclosure, as appropriate under the circumstances, or to otherwise make such disclosure pursuant to a protective order or other similar arrangement for confidentiality.

#### 20.16 Forward Contract.

The Parties acknowledge and agree that this REPA and the transactions contemplated by this REPA constitute a "forward contract" within the meaning of the United States Bankruptcy Code and that each Party is a "forward contract merchant" within the meaning of the United States Bankruptcy Code.

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## IN WITNESS WHEREOF, the Parties have executed this REPA.

Seller:

Paulding Wind Farm []

}0By:

Gabriel Alonso Imaz President

Jose Metelo ()
Vies President-Finance

Purchaser:

Ohio Power Company

By: Michael & March

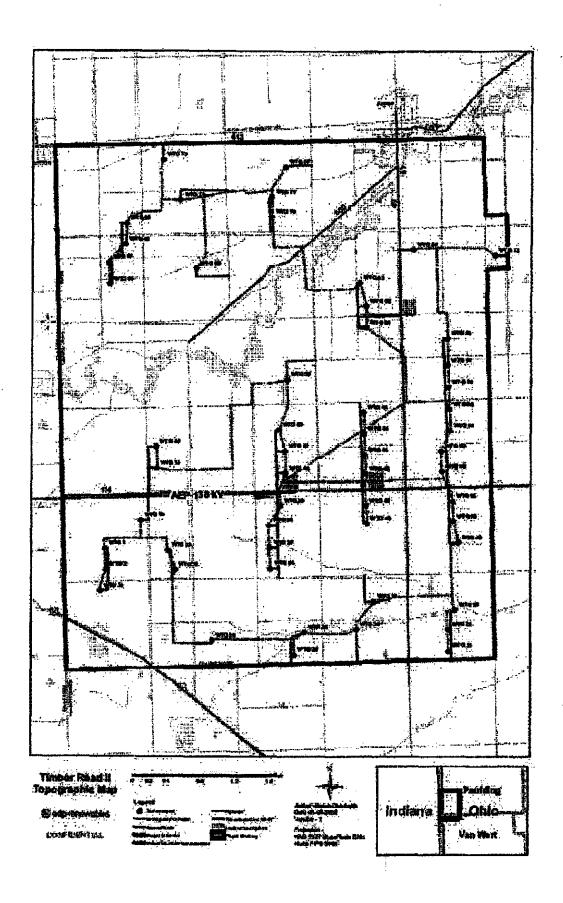
# EXHIBIT A INTENTIONALLY OMITTED

#### **EXHIBIT B**

#### **FACILITY DESCRIPTION AND SITE MAPS**

#### Facility Description

The Facility is comprised of wind turbine generators, meteorological towers, an electrical collection system, access roads for construction and maintenance, a 34.5 kV to 138 kV step up transformer and substation, SCADA system, and related equipment. The project is located in Paulding County, Ohio just east of the Indiana border. See attached site map on next page.



## **EXHIBIT C**

## **CONTRACT RATE**

### **EXHIBIT D**

## **NOTICE ADDRESSES**

Purchaser	Seller
Notices and Insurance:	Notices:
Other than invoices:  Ohio Power Company c/o American Electric Power Service Corporation 155 West Nationwide Boulevard Columbus, OH 43215 Attn: Contract Administration	Notices (other than operational notices):  Paulding Wind Farm II, LLC c/o Horizon Wind Energy LLC 808 Travis, Suite 700 Houston, TX 77002 Attention: Chief Commercial Officer
Fax: (614) 583-1606	Fax: (713) 265-0365
with copies to:	With copies to:
American Electric Power Service Corporation 155 West Nationwide Boulevard Columbus, OH 43215 Attn: Director, Credit Risk Department Fax: (614) 583-1604	Horizon Wind Energy LLC 808 Travis, Suite 700 Houston, TX 77002 Attention: General Counsel Fax: (713) 265-0365
and	, (,, <u>.</u>
Attn: Chief Counsel, CO&L American Electric Power Service Corporation 155 West Nationwide Boulevard Columbus, OH 43215 Attn: Chief Counsel Fax: (614) 583-1603	
and	
Attn: Risk and Insurance Management American Electric Power Service Corporation 1 Riverside Plaza Columbus, OH 43215	

Contract Administration Committee Representative:	Contract Administration Committee Representative:
Alternate: To be designated in writing by Purchaser at or prior to the first meeting of the Contract Administration Committee	Alternate:

#### **EXHIBIT E**

#### **INSURANCE COVERAGE**

#### SPECIFICATION OF INSURANCE COVERAGE

#### Type of Insurance

#### Minimum Limits of Coverage

Commercial General Liability (CGL)

\$11,000,000 combined single limit

Each and commercial umbrella occurrence and the aggregate,
where applicable if CGL insurance contains a general aggregate
limit, it shall apply separately to the Facility.

CGL insurance shall be written on ISO occurrence form CG 00 01 01 96 (or a substitute form providing equivalent coverage) and shall cover liability arising from premises, operations, independent contractors, products/completed operations, contracts, property damage, personal injury and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract), all with limits as specified above CGL insurance shall include ISO endorsement CG 24 17 (or an equivalent endorsement) which modifies the definition of "Insured contract" to eliminate the exclusion of easement or license agreements in connection with construction or demolition operations on or within 50 feet of a railroad. There shall be no endorsement or modification of the CGL insurance limiting the scope of coverage for liability arising from explosion, collapse, or underground property damage.

Purchaser shall be included as an insured under the CGL policy, using ISO additional insured endorsement CG 20 10 (or a substitute providing equivalent coverage), and under the commercial umbrella insurance. The commercial umbrella insurance shall provide coverage over the top of the CGL insurance, the Business Automobile Liability insurance, and the Employers Liability insurance.

The CGL and commercial umbrella insurance to be obtained by [or on behalf of] Seller shall be endorsed as follows:

Such insurance as afforded by this policy for the benefit of Purchaser shall be primary as respects any claims, losses, damages, expenses, or liabilities arising out of this REPA, and insured hereunder, and any insurance carried by Purchaser shall be excess of and noncontributing with insurance afforded by this policy

**Business Automobile Liability** 

\$1,000,000 combined single limit (each accident), including all Owned, Non-Owned, Hired and Leased Autos

Business Automobile Liability insurance shall be written on ISO form CA 00 01, CA 00 05, CA 00 12, CA 00 20, or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage equivalent to that provided in the 1990 and later editions of CA 00 01

Workers Compensation

Statutory Requirements. Seller may comply with these requirements through the use of a qualified self-insurance plan

Employers Liability

\$1,000,000 each accident for bodily injury by accident, or

\$1,000,000 each employee for bodily injury by disease

**Builder's Risk** 

Replacement value of the Facility

Builder's Risk insurance, or an installation floater, shall include coverage for earthquake and flood, collapse, faulty workmanship, materials and design, testing of machinery or equipment, freezing or changes in temperature, debris removal, and partial occupancy

Environmental Impairment Liability

\$5,000,000 each occurrence.

All-Risk Property insurance covering physical loss or damage to the Facility

Full replacement value of the Facility A deductible may be carried which deductible shall be the absolute responsibility of Seller

All-Risk Property insurance shall include: (i) coverage for fire, flood, wind and storm, tornado and earthquake with respect to facilities similar in construction, location and occupancy to the Facility, with sublimite of no less than \$10,000,000 each for flood and earthquake; and (ii) Boiler and Machinery insurance covering all objects customarity subject to such insurance, including boilers and turbines, in an amount equal to their full replacement value.

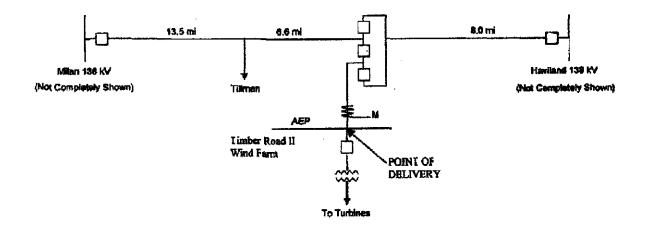
Business Interruption insurance

Amount required to cover Seller's continuing or increased expenses, resulting from full interruption, for a period of twelve (12) calendar months

Business Interruption insurance shall cover loss of revenues and the increased expense to resume operations attributable to the Facility by reason of total or partial suspension or delay of, or interruption in, the operation of the Facility as a result of an insured peril covered under Property insurance as set forth above, to the extent available on commercially reasonable terms as determined by Purchaser, subject to a reasonable deductible which shall be the responsibility of Seller Notwithstanding any other provision of this REPA, Seller shall not be required to have Business Interruption insurance until the Commercial Operation Date.

# EXHIBIT F [INTENTIONALLY OMITTED]

# EXHIBIT G POINT OF DELIVERY



#### **EXHIBIT H-1**

#### **T-1 Line Communication**



## **American Electric Power**

Wind Farm Requirements Specification New Plant Integration Checklist Plant (External Information) to Commercial Operations

**Revision History** 

Date	Version	Description	Author

## **Requirements Specification**

#### 1 Overview & Purpose

This document is a compilation of the data, system, hardware, and software requirements for prospective new plant builds, (existing) plant integrations, or power purchases. These requirements have been contributed by multiple business units and comprise an analysis and overview of the data, information, hardware, software, metering, and telecommunications needed to effectively communicate operating information to Commercial Operations. This is intended to serve as a guide for prospective acquisitions and new builds, so that all parties involved will have a comprehensive understanding of what will be required to bring a facility "online" in the AEP system. The tasks are specific to flow of information/data from the plant (outside) into Commercial Operations. Commercial Operations and the plant representatives are accountable for the successful completion of these tasks.

## 2 New Integration Requirements - Plant Information (150 Days Prior to Contract Start Date):

#### 2.1 Facility Information Requirements:

This section contains preliminary facility information as provided by the plant representatives. This information is static and is communicated from the Plant to Commercial Operations as an overall facility summary.

4	Pala Elements 41 - 51 - 5	THE RESIDENCE OF THE PARTY OF T
ui user.	arangangangangangangang	
1	Facility Name	•
2	Facility Address	
3	Current Owners name and address	
4	Owner's Project Manager name and contact information	
5	Control Area	·
В	Number of units and registered names (if it exists)	
7	Make and model of units	
8	Unit Name Plate Capacities	
9	Current Operating RTO	
1/27e2		
1	Туре	
2	Ramp Up/Down Time	(Both On / Off and when already on-line)
3	Starts / Stops Per Day	
4	Minimum Run / Down Time	
5	Regulation Capability	
6	Manufacturers Power Curve	

# 2.2 Forecasting Data Needs; Contract Section 4.7 Commercial Operations Milestones, Subsection (J)

#### Per Turbine Information:

- A. Latitude
- B. Longitude
- C Hub Height
- D Model
- E. Unique Identifier

#### Per Meteorological Tower Information;

- A. Latitude
- B. Longitude
- C Commissioning Sheet
- D Sensor Heights

#### Historical Data Needs:

- A 12 Month Past Power Production, if Applicable
- B Minimum 12 Month of Wind Speed and Wind Direction at, or near, Turbine Hub Height

#### 2.3 Contact Names and Information, See Attached Contact / Call Tree Form

- A Owner Contacts
- B Asset Manager Contact
- C. Project Manager Design & Construction
- D. Contract Personnel
- E Billing / Settlements Personnel
- F. Day Ahead Operations Personnel
- G Real Time Operations (24 Hour) Contacts
- H Telecommunications & SCADA Personnel

#### AEP contact for the above information request is Manager, Business Process Improvement Group

#### 3 New Integration Requirements - Design Data (120 Days Prior to Contract Start Date):

#### 3.1 Drawings & Diagrams

- A. Telecommunications Diagrams
- B. Substation Drawings:
  - a Facility Interconnection
  - b Transmission Interconnection
- C Meter Diagrams including:
  - a. Settlement Names
  - b. Bus Names

#### 4 New Integration Requirements – Data:

#### 4.1 Plant Equipment, Software & Hardware Requirements:

For power generation facilities integrated into the AEP fleet, or for specific Power Purchase Agreements (PPA's), it is critical that the facility be able to communicate operational data to our generation dispatch offices in a real-time manner. In addition, a power plant must also be interconnected to the transmission grid via an Interconnection Agreement with that transmission authority. This document specifically addresses data requirements needed by our generation dispatch systems. It does not relieve any power plant project from its responsibilities to provide similar data or additional data to the interconnected transmission authority. In the case of power plants connected to AEP's transmission grid, and which are owned by AEP, the majority of the key operating data is transmitted via the generation control system to the Regional Transmission Operator.

In order to transmit operational data, generally a power plant will have two primary communication devices, often called "RTUs": 1) Generation RTU, aka "Plant RTU" is required for any power plant that interfaces with AEP Generation Dispatch. The Generation RTU must be a <u>General Electric D20</u>, <u>purchased, owned, configured and maintained according to Good Utility Practice(s) by the seller and the RTU protocol must be <u>DNP3.0 over Ethernet</u> 2) Transmission RTU is a required device that is installed in the plant yard and specifically transmits data directly to a transmission authority. The transmission RTU transmits MW (Mega Watt) and MVAR (Mega Volt-Amperes) data instantaneously and as pulsed integrated (MWH and MVARH) values. These readings may be either plant or individual unit totals.</u>

For data communication from the Generation RTU to AEP, the seller will purchase, own, configure and maintain the following equipment:

## Router with Integrated switch card

Product	Description
	2811 /AC PWR, 2FE, 4HWICS, 2PVDMS, 1NME, 2AIMS, IPBASE,
CISCO2811	128/512D
S28NIPBK9-12423	CISCO 2800 IP BASE
HWIC-1DSU-T1	1-Port T1/Fractional T1 DSU/CSU WAN Interface Card
HWIC-4ESW	Four port 10/100 Ethernet switch interface card
CAB-AC	AC Power Cord (North American), C13, NEMA 5-15P, 2 1m
MEM2811-256U512D	256-512MB DDR DRAM factory upgrade for the Cisco 2811
PWR-2811-AC	Cisco 2811 AC power supply
CCP-EXPRESS	Cisco Config Pro Express on Router Flash
MEM2800-64U128CF	64 to 128MB CF fectory Upgrade for Cisco 2800 Series
ACS-2811-STAN	Cisco 2811 Standard Accessory Kit

## Firewall Equipment

NOTE: A quantity o two (2) each of the equipment listed below is required in order to meet the requirement of redundant firewalls

Product	Description
ASA5510-SEC-BUN-K9	ASA 5510 Security Plus Appl with SW, HA, 2GE+3FE, 3DES/AES
CAB-AC	AC Power Cord (North America), C13, NEMA 5-15P, 2 1m
SF-ASA-8 0-KB	ASA 5500 Series Software v8.0
ADA5510-SEC-PL	ASA 5510 Security Plus License with HA, GE, more VLANs + conns
ASA-VPN-CLNT-K9	Cisco VPN Client Software (Windows, Solaris, Linux, Mac)
SSM-BLANK	ASA/IPS SSM Slot Cover
ASA-180W-PWR-AC	ASA 180W AC Power Supply
ASA-ANYCONN-CSD-K9	ASA 5500 AnyConnect Client + Cisco Security Desktop Software
ASA5500-ENCR-K9	ASA 5500 Strong Encryption License (3DES/AES)

AEP contact for the above information request is Manager, Comm Ops SCADA Support.

# 4.2 Real Time Operations Wind Turbine Data Requirements -Submitted via RPA (RTU Point Assignment) to AEP:

This information is real time operational wind turbine data and is to be communicated electronically from the Plant to AEP Commercial Operations group. The Wind Turbine data will be used by AEP and/or a 3<sup>rd</sup> party wind forecasting company to forecast the amount of generation that a wind farm will be expected to generate. The individual wind turbine data is necessary to build the most accurate historical model of generation, so that future forecasts can be as precise as possible. The following data is required from each wind turbine.

#### Data must be transmitted at a minimum of once every 30 seconds.

	Data Ejements	<b>Description</b>	Source	Sink	Method of Communication
1	Turbine n Nacelle Wind Speed m/s	Per turbine, wind speed in meters/ second	Plant	GCSS	DNP3.0
2	Turbine n Nacelle Position deg	Per turbine, nacelle position in degrees	Plant	GCSS	DNP3.0
3	Turbine n Wind Deviation deg	Per turbine, wind deviation in degrees	Plant	GCSS	DNP3.0
4	Turbine n Turbine power kW	Per turbine, generation in KW	Plant	GC\$S	DNP3.0
5	Turbine n Blade Angle 1 - Actual deg	Per turbine, blade 1 Angle in degrees	Plant	GCSS	DNP3.0
- 6	Turbina n Blade Angle 2 - Actual deg	Per turbine, blade 2 Angle in degrees	Plant	GCSS	DNP3.0
7	Turbine n Blade Angle 3 - Actual deg	Per turbine, blade 3 Angle in degrees	Plant	GCSS	DNP3.0
8	Turbine n Turbine Status - Ready to generate, but wind speed too low	Provide each Turbine Status - Ready to generate but wind speed too low	Plant	GCSS	DNP3 0
9	Turbine in Turbine Status - Ready to generate, but wind speed too high	Provide each Turbine Status - Ready to generate, but wind speed too high	Plant	GCSS	DNP3 0
10	Turbine in Turbine Status - Online and generating	Provide each Turbine Status - Online and generating	Plant	GCSS	DNP3 0
11	Turbine n Turbine Status - Offline due to scheduled outage, or unplanned outage	Provide each Turbine Status - Offline due to schoduled outage, or unplanned outage	Plant	GCSS	DNP3 Q

Note: For each turbine (n = 1 to number of turbines at site). The turbine status information listed above is the minimum required. If available, the required turbine statuses can be transmitted as part of a larger turbine status information data packet, if available in the wind farm SCADA system.

AEP contact for the above information request is Manager, Comm Ops SCADA Support.

4.3 Real Time Operations Wind Turbine Meteorological Data Requirements (Submitted via RPA (RTU Point Assignment) to AEP):

This information is real time operational meteorological data and is to be communicated electronically from the Plant to AEP Commercial Operations. The meteorological data from the wind farm sites will be used by AEP and/or a 3<sup>rd</sup> party wind forecasting company to forecast the amount of generation that a wind farm will be expected to generate. The meteorological data is necessary to build the most accurate historical model of generation, so that future forecasts can be as accurate as possible.

Data must be transmitted at a minimum of once every 30 seconds.

	Data Elements	Description	Source	Sink	Communication
1	Met n Ambient Temperature deg C	Per Met Tower , ambient temperature	Plant	GCSS	DNP3.0
2	Met n Wind direction deg	Per Met Tower, wind direction	Plant	GCSS	DNP3 0
3	Met n Barometric Pressure mB	Per Met Tower, barometric pressure	Plant	GCSS	DNP30
4	Met n Humidity %	Per Met Tower, humidity	Plant	GCSS	DNP30
5	Met n Wind Speed (multiple points if multiple heights are available) m/s	Per Met Tower, wind speed in meters per second	Plant	GCSS	DNP3 0

Note: For each Met Tower (n = 1 to number of Met Tower at site)

# 4.4 Real Time Operations Wind Turbine Meter Data Requirements (Submitted via RPA (RTU Point Assignment) to AEP);

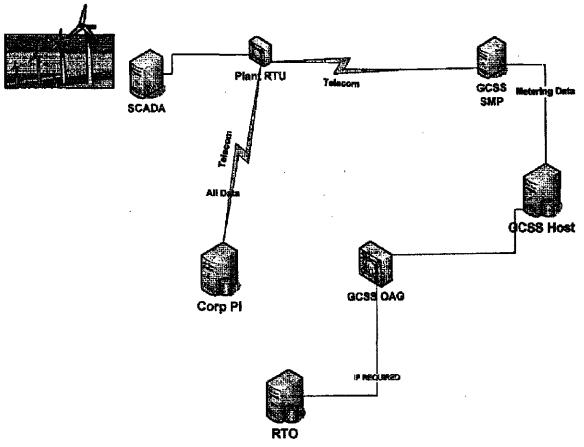
This information is real time operational meter data and is to be communicated electronically from the Plant to Commercial Operations. The meter data from the wind farm sites will be used by AEP and/or a 3<sup>rd</sup> party wind forecasting company to forecast the amount of generation that a wind farm will be expected to generate. The meter data is necessary to build the most accurate historical model of generation, so that future forecasts can be as accurate as possible

Data must be transmitted at a minimum of once every 6 seconds.

	Data Elements	<b>Description</b>	Source	Sink -	Method of Communication
1	Net MW	Per Net Megawatts	Plant	GCSS	DNP3 0
2	Net MVVh (in)	Per Net Megawatta Hour	Plant	GCSS	DNP3.0
3	Net MWh (Out)	Per Net Megawatts Hour			DNP3.0
4	Net MVAR	Per Net Mega Volt Amp Reactive	Plant	GCSS	DNP3.0
5	Net MVARh (In)	Per Net Mega Volt Amp Reactive Hour	Plant	GCSS	DNP3 0
8	Net MVARh (Out)	Per Net Mega Volt Amp Reactive Hour	Plant	GCSS	DNP3 0
7	Plant Bus Voltage	line/bus voltage at substation	Plant	GC8S	DNP3 0
8	Breaker Status	Breaker Status at Point of Interconnection	Plant	GCSS	DNP3 0

AEP contact for the above information request is Manager, Comm Ops SCADA Support.

### 6 Metering & Data Flow Units to GCSS System



Data Flow Diagram

Wind Farm Forecasting Dataflow Model

#### 6 Acronyms and Abbreviations:

- Acronyms, Abb	eviations Description
AEP	American Electric Power
DNP 3.0	Distributed Network Protocol
GCSS	Generation Control SCADA System
Modbus	Protocol messaging structure developed by Modicom
MVAR	Mega Volt Amp Reactive
MVARh	Mega Volt Amp Reactive Hour
MW	Megawatt or 1 million watts
MWh	Mega Watt Hour
MWnet	The difference between gross generation and unit auditary load measured in Megawatts
NERC	North American Electric Reliability Corporation
PPA	Purchased Power Agreement
RTO	Regional Transmission Organization
RTU	Remote Terminal Unit
SCADA	Supervisory Control and Data Acquisition

# EXHIBIT H-2 Pi to Pi Communication



## **American Electric Power**

Wind Farm Requirements Specification
New Plant Integration Checklist
Plant (External Information) to Commercial Operations

**Revision History** 

Date	Version	Description	Author

### **Requirements Specification**

#### 7 Overview & Purpose

This document is a compilation of the data, system, hardware, and software requirements for prospective new plant builds, (existing) plant integrations, or power purchases. These requirements have been contributed by multiple business units and comprise an analysis and overview of the data, information, hardware, software, metering, and telecommunications needed to effectively communicate operating information to Commercial Operations. This is intended to serve as a guide for prospective acquisitions and new builds, so that all parties involved will have a comprehensive understanding of what will be required to bring a facility "online" in the AEP system. The tasks are specific to flow of information/data from the plant (outside) into Commercial Operations. Commercial Operations and the plant representatives are accountable for the successful completion of these tasks.

## 8 New Integration Requirements – Plant Information (150 Days Prior to Contract Start Data):

#### 8.1 Facility Information Requirements:

This section contains preliminary facility information as provided by the plant representatives. This information is static and is communicated from the Plant to Commercial Operations as an overall facility summary.

<b>33</b> 55	THE BUILDING SERVICE TO SERVICE TO SERVICE OF THE S	
		THE PERPETUITION OF THE PE
- 1	Facility Name	
2	Facility Address	
. 3	Current Owners name and address	
4	Owner's Project Manager name and contact information	
5	Control Area	
- 5	Number of units and registered names (if it exists)	
7	Make and model of units	
8	Unit Name Plate Capacities	
9	Current Operating RTO	
1	Туре	
2	Ramp Up/Down Time	(Both On / Off and when already on-line)
3	Starts / Stops Per Day	
4	Minimum Run / Down Time	
5	Regulation Capability	
8	Manufacturers Power Curve	

# 8.2 Forecasting Data Needs; Contract Section 4.7 Commercial Operations Milestones, Subsection (J)

#### Per Turbine Information:

- F. Latitude
- G Longitude
- H. Hub Height
- i. Model
- J. Unique Identifier

#### Per Meteorological Tower Information;

- E. Latitude
- F Longitude
- G Commissioning Sheet
- H Sensor Heights

#### Historical Data Needs:

- C 12 Month Past Power Production, If Applicable
- D Minimum 12 Month of Wind Speed and Wind Direction at, or near, Turbine Hub Height

#### 8.3 Contact Names and Information, See Attached Contact / Call Tree Form

- Owner Contacts
- J Asset Manager Contact
- K Project Manager Design & Construction
- L Contract Personnel
- M. Billing / Settlements Personnel
- N. Day Ahead Operations Personnel
- O Real Time Operations (24 Hour) Contacts
- P Telecommunications & SCADA Personnel

#### AEP contact for the above information request is Manager, Business Process Improvement Group

- 9 New Integration Requirements Design Data (120 Days Prior to Contract Start Date):
- 9.1 Drawings & Diagrams
- D Telecommunications Diagrams
- E. Substation Drawings;
  - a Facility Interconnection
  - b Transmission Interconnection
- F Meter Diagrams including;
  - a Settlement Names
  - b Bus Names
- 10 New Integration Requirements Data:
- 10.1 Plant Equipment, Software & Hardware Requirements:

For power generation facilities integrated into the AEP fleet, or for specific Power Purchase Agreements (PPA's), it is critical that the facility be able to communicate operational data to our generation dispatch offices in a real-time manner. In addition, a power plant must also be interconnected to the transmission grid via an Interconnection Agreement with that transmission authority. This document specifically addresses data requirements needed by our generation dispatch systems. It does not relieve any power plant project from its responsibilities to provide similar data or additional data to the interconnected transmission authority. In the case of power plants connected to AEP's transmission grid, and which are owned by AEP, the majority of the key operating data is transmitted via the generation control system to the Regional Transmission Operator.

in order to transmit operational data, generally a power plant will have two primary communication methods: 1) PI to PI Interface, where the PItoPI exe interface is run on an AEP server at an AEP location separate from the wind farm site, which collects data from the Wind Farm PI system 2) Transmission RTU is a required device that is installed in the plant yard and specifically transmits data directly to a transmission authority. The transmission RTU transmits MW (Mega Watt) and MVAR (Mega Volt-Amperes) data instantaneously and as pulsed integrated (MWH and MVARH) values. These readings may be either plant or individual unit totals

For data communication between AEP and the Wind Farm PI Server, the seller will purchase, own, configure and maintain the following equipment:

### Router with Integrated switch card

Product	Description
	2811 /AC PWR, 2FE, 4HWICS, 2PVDMs, 1NME, 2AIMS, IPBASE,
C1SC02811	128/512D
S28NIPBK9-12423	CISCO 2800 IP BASE
HWIC-1DSU-T1	1-Port T1/Fractional T1 DSU/CSU WAN Interface Card
HWIC-4ESW	Four port 10/100 Ethernet switch interface card
CAB-AC	AC Power Cord (North American), C13, NEMA 5-15P, 2.1m
MEM2811-256U512D	256-512MB DDR DRAM factory upgrade for the Cisco 2811
PWR-2811-AC	Cisco 2811 AC power supply
CCP-EXPRESS	Cisco Config Pro Express on Router Flash
MEM2800-64U128CF	64 to 128MB CF factory Upgrade for Cisco 2800 Series
ACS-2811-STAN	Cisco 2811 Standard Accessory Kit

AEP contact for the above information request is Manager, Comm Ops SCADA Support.

# 10.2 Real Time Operations Wind Turbine Data Requirements (Submitted via RPA (RTU Point Assignment) to AEP):

This information is real time operational wind turbine data and is to be communicated electronically from the Plant to AEP Commercial Operations group. The Wind Turbine data will be used by AEP and/or a 3<sup>rd</sup> party wind forecasting company to forecast the amount of generation that a wind farm will be expected to generate. The individual wind turbine data is necessary to build the most accurate historical model of generation, so that future forecasts can be as precise as possible. The following data is required from each wind turbine.

#### Data must be transmitted at a minimum of once every 30 seconds

4	<b>Data Elements</b>	Description	Source	Sink	Method of Communication
4	Turbine n Nacelle Wind Speed m/s	Per turbine, wind speed in meters/ second	Plant	GCSS	DNP3.0
2	Turbine n Nacelle Position deg	Per furbine, nacelle position in degrees	Plant	ecss	DNIP3.0
7	Turbine n Wind Deviation deg	Per turbine, wind deviation in degrees	Plant	GCSS	DNP3.0
Ĭ	Turbine n Turbine power kW	Per turbine, generation in KW	Plant	GCSS	DNP3.0
5	Turbine n Blade Angle 1 - Actual deg	Per turbine, blade 1 Angle in degrees	Plant	GCSS	DNP3.0
	Turbine n Blade Angle 2 - Actual deg	Per turbine, blade 2 Angle In degrees	Plant	GCSS	DNP3.0
-	Turbine n Blade Angle 3 - Actual deg	Per turbine, blade 3 Angle in degrees	Plant	GCSS	DNP3.0
8	Turbine a Turbine Status - Ready to generate, but wind speed too low	Provide each Turbine Status - Ready to generate but wind speed too low	Plant	GCSS	DNP3 0
9	Turbing in Turbine Status - Ready to generate, but wind speed too high	Provide each Turbine Status - Ready to generate but wind speed too high	Plant	GCSS	DNP3 0
10	Turbine n Turbine Status - Online and generating	Provide each Turbine Status - Online and generating	Plant	GCSS	DNP3.0
11	Turbine n Turbine Status - Offline due to scheduled outage, or unplanted outage	Provide each Turbine Status - Offline due to scheduled outage, or unplanned outage	Plant	ocss	DNP3 0

Note: For each turbine (n = 1 to number of turbines at site). The turbine status information listed above is the minimum required. If available, the required turbine statuses can be transmitted as part of a larger turbine status information data packet, if available in the wind farm SCADA system

AEP contact for the above information request is Manager, Comm Ops SCADA Support.

# 10.3 Real Time Operations Wind Turbine Meteorological Data Requirements (Submitted via RPA (RTU Point Assignment) to AEP):

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Data must be transmitted at a minimum of once every 30 seconds

#	Pata Elamente	<b>Description</b>	Source	Sink	henoira Communication
1	Met n Ambient Temperature deg C	Per Met Tower , ambient temperature	Plant	GCSS	DNP3.0
2	Met n Wind direction deg	Per Met Tower, wind direction	Plant	GCSS	DNP30
3	Met n Barometric Pressure mB	Per Met Tower, barometric pressure	Plant	GCSS	DNP3 0
4	Met n Humidity %	Per Met Tower, humidity	Plant'	GCSS	DNP3 0
5	Met n Wind Speed (multiple points if multiple heights are available) m/s	Per Met Tower wind speed in meters per second	Plant	GCSS	DNP3 0

Note: For each Met Tower (n = 1 to number of Met Tower at site)

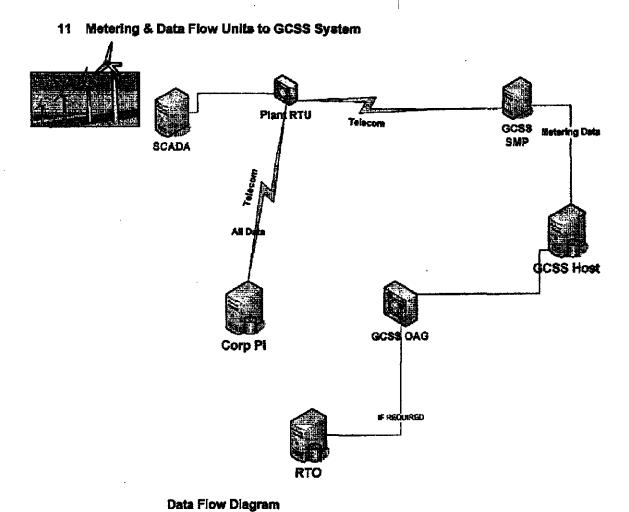
# 10.4 Real Time Operations Wind Turbine Meter Data Requirements (Submitted via RPA (RTU Point Assignment) to AEP):

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Data must be transmitted at a minimum of once every 6 seconds.

	Para Elements	ri Pascapiton	Source	Sink.	Meiror of war
1	Net MW	Per Net Megawatts	Plant	GCSS	DNP3 0
2	Net M/M/h (in)	Per Net Megawatts Hour	Plant	GCSS	DNP3 0
3	Net MWh (Out)	Per Net Megawetts Hour			DNP3.0
4	Net MVAR	Per Net Mega Volt Amp Reactive	Plant	GCSS	DNP3.0
5	Net MVARh (In)	Per Net Mega Volt Amp Reactive Hour	Plant	GCSS	DNP3.0
6	Net MVARh (Out)	Per Net Mega Volt Amp Reactive Hour	Plant	GCSS	DNP3.0
7	Plant Bus Voltage	line/bus voltage at substation	Plant	GCSS	DNP3 0
8	Breaker Status	Breaker Status at Point of Interconnection	Plant	GCSS	DNP3 0

AEP contact for the above information request is Manager, Comm Ops SCADA Support.

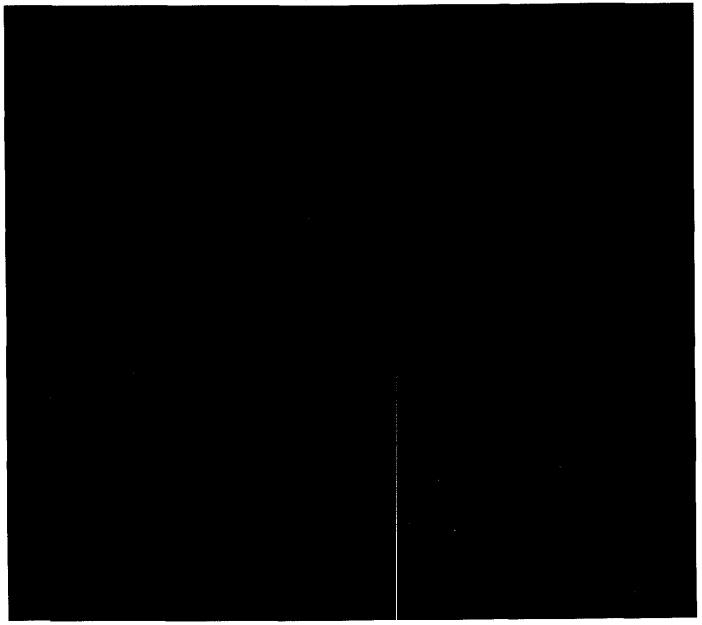


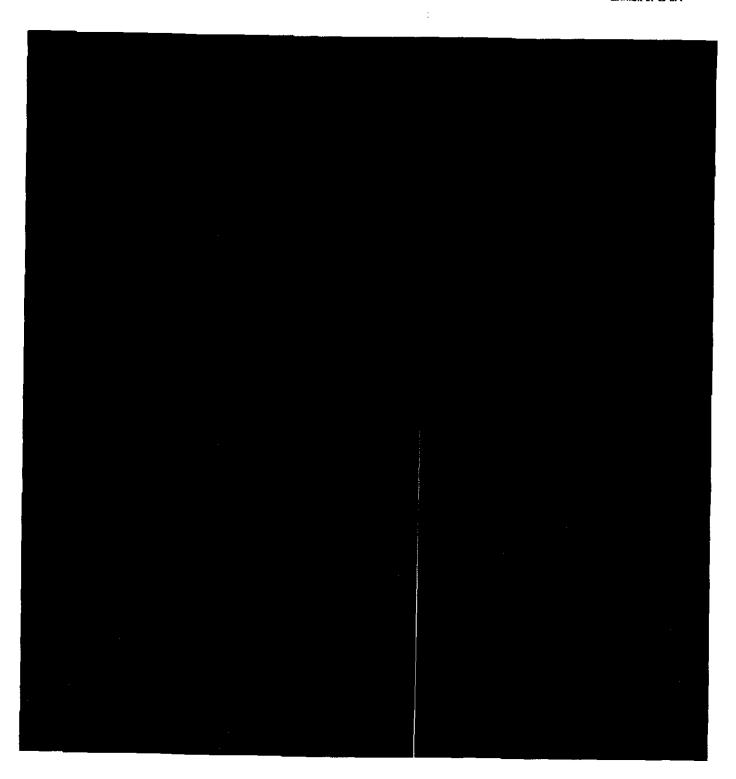
Wind Farm Forecasting Dataflow Model

### 12 Acronyms and Abbreviations:

Acronyms, Abbreviations	Description
AEP	American Electric Power
DCS	Digital Control System
DNP 3.0	Distributed Network Protocol
GCSS	Generation Control SCADA System
Modbus	Protocol messaging structure developed by Modicom
MVAR	Mega Volt Amp Reactive
MVARh	Mega Volt Amp Reactive Hour
MW_	Megawatt or 1 million watts
MWh	Mega Watt Hour
MWnet	The difference between gross generation and unit auxillary load measured in Megawatts
NERC	North American Electric Reliability Corporation
Pi	"Plant Information" is the application that archives operating data
PI2PI	Pi-to-Pi communication Interface
PLC	Programmable Logic Controller
PJM PJM	PJM interconnection, LLC
PPA	Purchased Power Agreement
Processbook	The PC based application used to display PI information
RTO	Regional Transmission Organization
RTU	Remote Terminal Unit
SCADA	Supervisory Control and Data Acquisition
T&D	Transmission & Distribution
UDR	Unit Data Repository

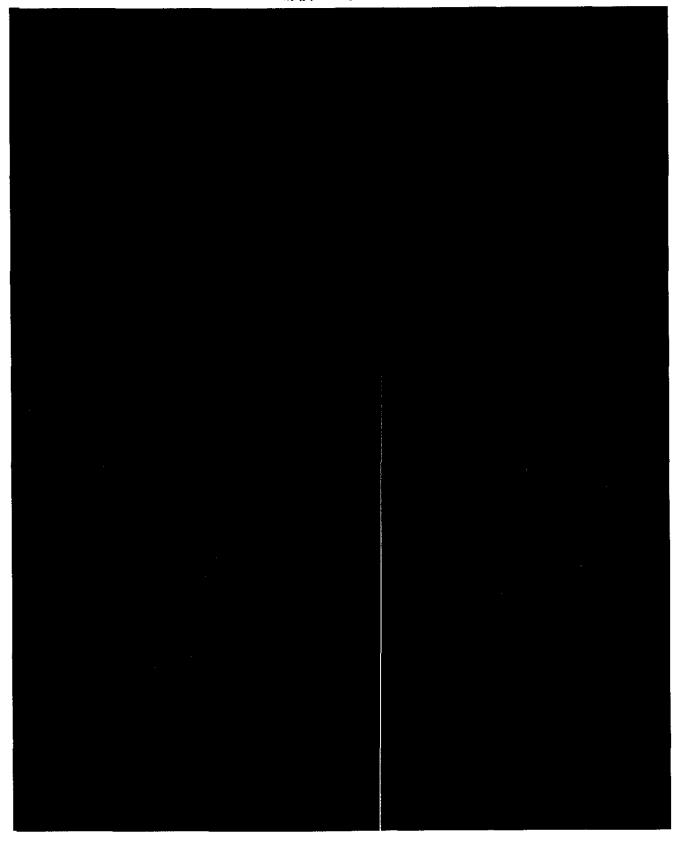
EXHIBIT I

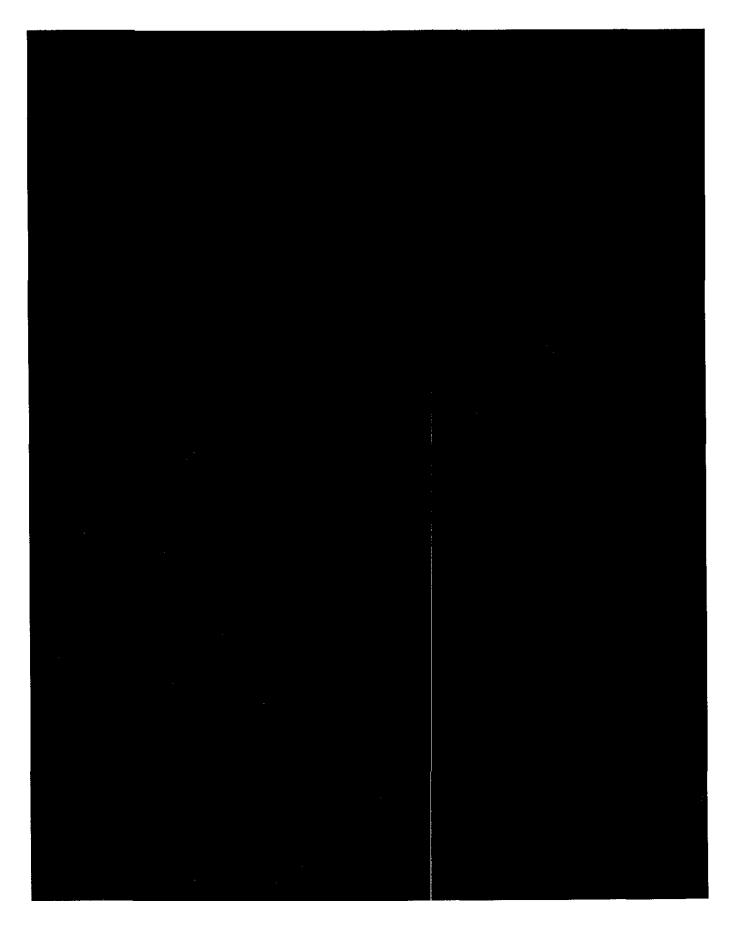


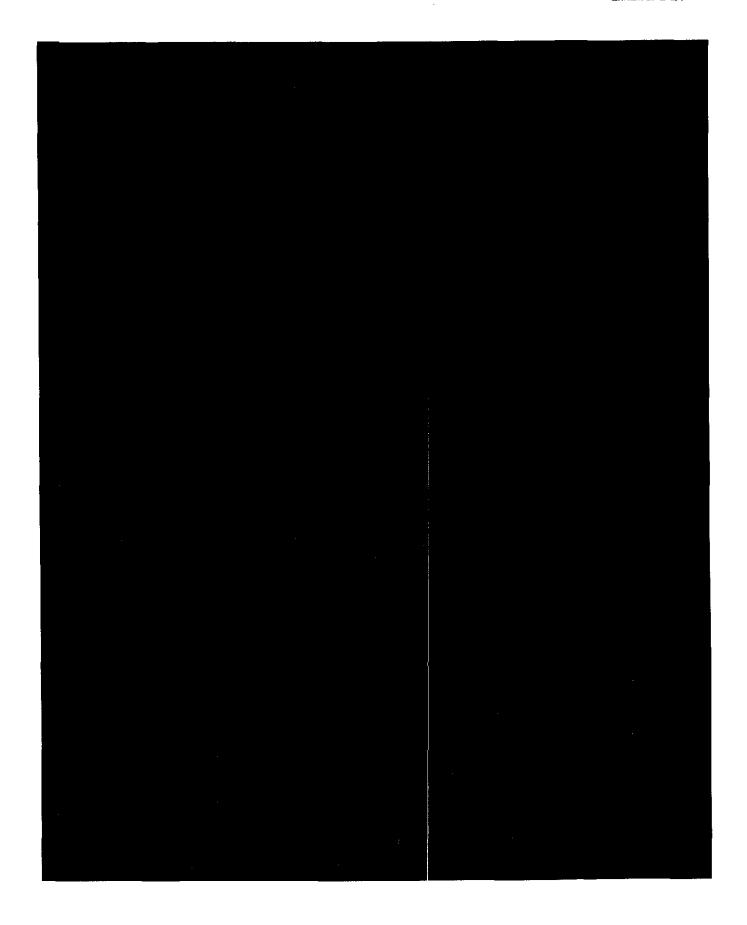












### EXHIBIT K

### FORM OF AVAILABILITY NOTICE

Effective	Date	 
Time		

Hour	Capacity	Number of Wind Turbines In Operation
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
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# EXHIBIT L FORM OF LETTER OF CREDIT

