

EXHIBIT NO. \_\_\_\_\_

BEFORE  
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application Seeking	)	
Approval of Ohio Power Company's	)	Case No. 18- 1392-EL-RDR
Proposal to Enter Into Renewable Energy	)	
Purchase Agreements for Inclusion in the	)	
Renewable Generation Rider	)	
In the Matter of the Application of Ohio	)	Case No. 18- 1393-EL-ATA
Power Company to Amend its Tariffs	)	

DIRECT TESTIMONY OF  
DANIEL R. BRADLEY  
ON BEHALF OF  
OHIO POWER COMPANY

Filed September 27, 2018

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DANIEL BRADLEY

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BEFORE  
THE PUBLIC UTILITIES COMMISSION OF OHIO  
DIRECT TESTIMONY OF  
DANIEL R. BRADLEY  
ON BEHALF OF  
OHIO POWER COMPANY

1    **PERSONAL DATA**

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

3    A.     My name is Daniel R. Bradley. My business address is 98 San Jacinto Blvd. Suite 900,  
4           Austin, TX 78701.

5    **Q.     PLEASE INDICATE BY WHOM YOU ARE EMPLOYED AND IN WHAT**  
6           **CAPACITY.**

7    A.     I am employed by Navigant Consulting (“Navigant”) as a Managing Director.

8    **BUSINESS EXPERIENCE**

9    **Q.     PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL BACKGROUND AND**  
10          **BUSINESS EXPERIENCE.**

11   A.     I received a Master’s Degree in Business Administration from Clemson University In  
12          1999 and a Bachelor of Arts Degree in Geography from Rutgers University in 1995. I  
13          have over 23 years of experience, including over 17 years with Navigant. Before  
14          joining Navigant, I held full-time held positions at GoCargo, a software company that  
15          developed and commercially offered a competitive bidding auction service, and at  
16          Maersk, Inc. My consulting experience at Navigant has focused on designing and  
17          implementing competitive bidding processes for the procurement of renewable power  
18          resources, demand response, and renewable products for electric utilities. I provide  
19          advice regarding the design of bidding procedures and processes, RFPs, bid evaluations

1 and have served as Independent Evaluator, Solicitation Administrator, and RFP Monitor.

2 My qualifications and professional experience are more fully described in Attachment  
3 DB-1.

4 **Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY AS A WITNESS?**

5 A. Yes. I have testified and submitted testimony before the Public Utilities Commission of  
6 Ohio (PUCO, Commission) on behalf of the FirstEnergy Ohio Utilities - Ohio Edison  
7 Company, The Cleveland Electric Illuminating Company, and The Toledo Edison  
8 Company, in Case No. 1-5201-EL-RDR.

9 **PURPOSE OF TESTIMONY**

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

11 A. My testimony describes Navigant's work as the Independent Evaluator for an RFP  
12 recently conducted by AEP Ohio. In accordance with a March 31, 2016 Opinion and  
13 Order and a November 3, 2016 Second Entry on Rehearing (collectively, "Decision")  
14 issued by the Commission in Case No. 14-1693-EL-RDR, a Joint Stipulation and  
15 Recommendation ("Stipulation") was approved. AEP Ohio, as part of the Stipulation  
16 committed to propose new renewable projects in the state totaling 400 MW from solar  
17 energy resources. On October 18, 2017, AEP Ohio issued a RFP for up to 400 MW of  
18 new solar energy resources located in AEP Ohio's service territory in Appalachian Ohio  
19 (Solar RFP).<sup>1</sup>

20 AEP Ohio retained Navigant to assist AEP Ohio in managing the development of  
21 the Solar RFPs, collaborating with AEP on the criteria for evaluation of the price and

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<sup>1</sup> An earlier version of this Solar RFP was issued in December 2016 but was terminated by AEP in July 2017.

1 non-price terms of proposals, selecting the short list of proposals for final evaluation, and  
2 overseeing the final selection of proposal(s) that best fit the evaluation criteria. Navigant,  
3 as the Independent Evaluator for the RFP, was involved in all phases of the RFP  
4 evaluation process to ensure that the process and selection of the award group was fair  
5 and transparent, not preferential, satisfied the requirements of the RFP, and were  
6 consistent with the Commission Decision. Ultimately, through this process, AEP Ohio  
7 reached proposed agreements with 2 parties for the contracting of 400 MWac of  
8 aggregate solar capacity.

9 **Q. DOES NAVIGANT HAVE EXPERIENCE IN STRUCTURING AND**  
10 **ADMINISTERING SIMILAR RFPs?**

11 A. Yes, Navigant has served as an independent RFP manager to promote a fair, open, and  
12 non-discriminatory RFP process for numerous other procurement engagements in the  
13 electric power sector. Navigant's energy consulting practice focuses primarily on the  
14 electric utility industry. Within the Navigant energy practice, there is a team that focuses  
15 on advising electric utility clients on competitive procurements. Since 2001 (the year I  
16 joined Navigant), this team has assisted clients in approximately 50 competitive  
17 procurements with an estimated total contract value of over \$14 billion. Within the  
18 Navigant team, I have been the project manager or assistant project manager on over 25  
19 competitive procurement engagements, including activities such as drafting the requests  
20 for proposals, developing a quantitative and qualitative evaluation plan, managing the  
21 solicitation, evaluating the proposals, developing the contracts, and supporting  
22 negotiations and any required contract approvals.

1 **Q. WHAT EXHIBITS ARE YOU SPONSORING IN THIS PROCEEDING?**

2 A. I am sponsoring the following exhibits:

- 3 • Exhibit DB-1 (Curriculum Vita)
- 4 • Exhibit DB-2 (Solar RFP)

5 **NAVIGANT'S ROLE IN THE SOLAR RFP PROCESS**

6 **Q. DOES YOUR TESTIMONY PROVIDE THE SUBSTANTIVE DETAILS OF THE**  
7 **RFP PROCESS?**

8 A. Yes. My testimony describes all the key elements of the RFP design, administration and  
9 evaluation process. Furthermore, the main RFP documents provided to bidders and the  
10 procedures used to evaluate bids are attached to my testimony.

11 **Q. CAN YOU DESCRIBE NAVIGANT'S ROLE IN THE STAGES OF THE RFP**  
12 **PROCESS THAT LED TO THE PROPOSED TRANSACTIONS?**

13 A. Navigant served as the Independent Evaluator for the RFP to help ensure consistency and  
14 fairness through all stages of the RFP process, including the 1) design, 2) administration,  
15 3) evaluation and 4) conclusion stages. Each of these stages is described in further detail  
16 below.

17 **Q. CAN YOU DESCRIBE HOW NAVIGANT'S ROLE HELPED TO ENSURE THE**  
18 **CONSISTENCY AND FAIRNESS OF THE RFP PROCESS?**

19 A. The Stipulation provides that AEP Ohio affiliates will have the right, based on  
20 commercially reasonable terms, to initially own up to 50% of such projects on an  
21 aggregate net basis based on installed capacity. As such, the RFPs were designed to  
22 anticipate the prospect of an affiliate transaction – even if one ultimately were not to  
23 occur. For the Solar RFP, Navigant used the Federal Energy Regulatory Commission

1 (“FERC”) *Edgar* criteria as a set of guiding principles to ensure consistency and fairness  
2 of the RFP processes. The FERC stated in *Allegheny*<sup>2</sup> that the underlying principle when  
3 evaluating a competitive solicitation process under the *Edgar* criteria is that no affiliate  
4 should receive undue preference during any stage of the process.

5 **Q. CAN YOU DESCRIBE THE DESIGN STAGE OF THE SOLAR RFP PROCESS?**

6 A. Navigant worked with AEP Ohio to design the Solar RFP processes and prepare RFP  
7 documentation including the qualitative and quantitative bid evaluation criteria. In  
8 addition, Navigant assisted in identifying potentially interested parties.

9 **Q. WHAT WERE THE KEY REQUIREMENTS FOR THE SOLAR RFP AS**  
10 **DEVELOPED DURING THE DESIGN STAGE?**

11 A. To meet the objectives of the Stipulation, AEP Ohio requested bids to obtain up to  
12 approximately 400 MW of nameplate rated Solar Energy Resources. The resources would  
13 be procured through a Renewable Energy Purchase Agreement (REPA) of 20 years in  
14 duration, under which AEP Ohio would purchase the facilities’ renewable energy  
15 products (energy, capacity, ancillary services and environmental attributes).

16 Solar projects were required to have a minimum nameplate capacity rating of 50  
17 MW (or alternatively be comprised of an aggregation of 10 MW and larger projects to  
18 reach 50 MW or more), to be substantially located in AEP Ohio’s service territory in  
19 Appalachian Ohio and interconnected to the PJM RTO system, with construction started  
20 after January 1, 2016 and an estimated commercial operation date no later than December  
21 31, 2021. In accordance with the Stipulation, all proposals were required to contain an

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<sup>2</sup> Allegheny Energy Supply Company, LLC, 108 FERC ¶61,082 (2004)

option to purchase 50% of the equity interests in the project, at completion, by AEP Ohio or an AEP affiliate.<sup>3</sup>

For ease of bid comparison in the evaluation process and to ensure all projects had a similar pricing profile, the bid price for the REPA was for a bundled renewable energy product including energy, capacity, ancillary services and environmental attributes, on an “as-available” per MWh basis with no separate capacity payment. The bid price was to cover all costs associated with delivering the full contracted energy output of the facility to the bid-specified point of delivery, including costs associated with interconnections and transmission, including any system upgrades, as required by PJM up to the point of delivery. The bid price was an “all-in” around-the-clock price on a dollar per MWh (\$/MWh) basis for the term of the REPA at a single, fixed price that does not include escalation.

**Q. WHAT RFP DOCUMENTATION WAS PREPARED FOR THE SOLAR RFP DURING THE DESIGN STAGE?**

A. Along with the main body of the RFP and the RFP Form Confidentiality Agreement (CA), the following RFP Appendices were prepared during the design stage and attached to the RFP for respondents to complete:

- Appendix A (Solar Project Summary)
- Appendix B (Bidder’s Credit-Related Information)
- Appendix C (Bidder Profile)
- Appendix D (Finance Plan)

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<sup>3</sup> Other than the requirement that the option to purchase was included in the bidder’s proposal, the option to purchase was not considered further in the bid selection process.



- Appendix E (Form Renewable Energy Purchase Agreement (REPA))
- Appendix F (Form Term Sheet)
- Appendix G (Proposal Content Check List)

The Solar RFP and attachments is provided as Exhibit DB-2

**Q. WERE PROCEDURES FOR CONDUCTING THE COMPETITIVE BIDDING  
PROCESS FOR SOLAR ENERGY ESTABLISHED AND DOCUMENTED?**

A. Yes. Prior to bids being received, Navigant and AEP Ohio developed and finalized the 2017 Solar Energy Resources RFP Bid Procedures Manual (“Solar Manual”) describing in detail the evaluation process and scoring steps and procedures that would be conducted by Navigant once the bids were received. This Solar Manual was developed to outline the procedures surrounding the implementation of AEP Ohio’s competitive bidding procurement process for the Solar RFP. These procedures were designed to ensure that the procurement process would be implemented in a fair and equitable manner and that bids would be evaluated in a consistent and unbiased manner affording each bidder, including any affiliate bidders, an equal opportunity to compete within the RFP framework. In addition, the Solar Manual addresses the documentation, communication, and negotiation processes with bidders and the conditions for proposal disqualification. The Solar Manual was used by AEP Ohio and by Navigant throughout the Solar RFP process. The Solar Manual is confidential and can be provided to parties through discovery upon request, provided they execute an appropriate protective agreement.

1 **Q. WHAT EVALUATION PROCESS WAS DEVELOPED FOR THE SOLAR RFP**  
2 **DURING THE DESIGN STAGE?**

3 A. The evaluation process developed included three main steps, 1) Eligibility and Threshold  
4 Requirements and 2) Cost, Non-Cost and Preference Factors Evaluation Phase, and 3)  
5 Selection of Short List Bids.

6 During the evaluation process, the identity of Bidders submitting Proposals  
7 remained confidential to Navigant, acting as the IE. AEP Ohio was not informed of the  
8 identity of bidders until after the Short List of bids had been selected to ensure that bids  
9 would be evaluated in a consistent and unbiased manner affording each bidder, including  
10 any affiliate bidders, an equal opportunity to compete within the RFP framework which  
11 included the Preference Factors Evaluation of the Ohio economic preference factors  
12 described above.

13 The RFP listed the key parameters to be used in the evaluation process, and the  
14 bid scoring that would be applied.

15 **Q. CAN YOU DESCRIBE THE ADMINISTRATION STAGE OF THE SOLAR RFP**  
16 **PROCESS?**

17 A. In the Solar RFP administration stage, documentation and instructions related to the RFP  
18 was approved by Navigant prior to issuing the RFP. The RFP contained specific  
19 instructions regarding communications with respect to the RFP process, and specifically  
20 with respect to the submission of questions. AEP Ohio established a separate internet web  
21 address (RFP Webpage) for the Solar RFP and issued the RFP on October 17, 2017.<sup>4</sup> The

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<sup>4</sup> AEP Ohio established a webpage for its 2017 Ohio Solar Energy RFP at:  
<https://www.aepohio.com/b2b/rfp/2017SolarEnergy/>

1 RFP Webpage was available to the public with information about the RFP and a link to  
2 the RFP documents. AEP Ohio issued a news release to the public on October 18, 2017.<sup>5</sup>

3 All inquiries and questions from parties were requested to be submitted via the  
4 RFP e-mail address and were received by Navigant. The questions received from  
5 prospective bidders were accumulated on a periodic basis and answers were drafted by  
6 Navigant and AEP Ohio. The questions and answers were then posted to the RFP  
7 Webpage with any identifying information regarding the prospective bidder redacted.

8 As described in the Solar RFP Section 4.3, only Bidders who executed a  
9 Confidentiality Agreements with AEP Ohio would be provided the confidential Form  
10 REPA or the confidential Form Term Sheet. Navigant received all Bidder requests for  
11 execution of the Confidentiality Agreements via email and provided each Bidder with  
12 instructions to return the Confidentiality Agreements, completed and signed, via e-mail to  
13 Navigant. Navigant then provided the signed Confidentiality Agreements to a designated  
14 contact at AEP Legal for final execution. AEP Legal returned the executed  
15 Confidentiality Agreement to Navigant and authorized Navigant to release the  
16 confidential Form REPA or the confidential Form Term Sheet to the requesting Bidder  
17 via e-mail.

18 Bidders were required to submit proposals electronically to Navigant by  
19 December 18, 2017. In total, 13 proposals were received on-time and logged. No bidder  
20 proposals were received late.

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<sup>5</sup> AEP Ohio news release:

<https://www.aepohio.com/global/utilities/lib/docs/b2b/rfp/AEPOhio/2017SolarEnergy/OhioSolarRFPReleaseOctober2017.pdf>

1 **Q. WERE ANY BIDDER PROPOSALS FOR THE SOLAR RFP SUBMITTED BY**  
2 **AN AFFILIATE?**

3 A. No.

4 **Q. CAN YOU DESCRIBE THE EVALUATION STAGE OF THE SOLAR RFP**  
5 **PROCESS?**

6 A. Yes. As described below, an initial screening process of the bids was conducted by  
7 Navigant, followed by bid price refresh related to new industry developments since the  
8 receipt of the bids, and the subsequent Cost/Non-Cost/Preference Factors scoring stage  
9 used to develop a Short List.

10 Initial Screening Process. After receipt of the proposals as of the due date of December  
11 18, 2017, Navigant reviewed all responses for completeness, responsiveness and  
12 compliance with the RFP eligibility and threshold requirements. Thirteen solar project  
13 proposals (Proposals 1 – 13), ranging from 50 to 400 MW in size (1,700 MW total), were  
14 submitted by six different bidders (Bidders 1 – 6). During this screening, Navigant  
15 contacted certain bidders to clarify information or request additional information.  
16 Navigant made these requests in writing via email and bidders were required to respond  
17 to the request within five (5) business days of receipt. Ultimately, through this screening  
18 process, Navigant eliminated one proposal from further consideration for not meeting the  
19 locational requirements of the RFP.

20 Tax Reform/Tariff Rebids. After the RFP proposal due date, in late December 2017, the  
21 U.S. Tax Cuts and Jobs Act was enacted on December 22, 2017 which modified business  
22 tax rates and depreciation schedules, among other changes. As a result, all bidders were  
23 given an opportunity to modify their bid prices submitted on December 18, 2017. No

1 other changes to the proposals were permitted. Revised pricing was solicited from all  
2 bidders on January 11, 2018 and revised bid prices were received from 2 of the 6 bidders.  
3 Section 201 tariffs on imported solar cells and modules were approved on January 22,  
4 2018 by President Trump. As a result, revised pricing was again solicited from all  
5 bidders on January 24, 2018 and revised bid prices were received from 2 of the 6 bidders.  
6 Cost, Non-Cost and Preference Factors Evaluation Phase. During this phase, Navigant  
7 evaluated cost factors, non-cost factors and Ohio economic preference factors to identify  
8 the proposals with the best combination of value, risk and economic and job growth for  
9 AEP Ohio's customers and the region. As described below, these factors were evaluated  
10 by Navigant using a 100-point scoring system with the following weightings: 1) Cost  
11 Factors (60%), 2) Non-Costs Factors (15%), 3) Ohio Economic Preference Factors  
12 (25%). Further detail on each of these scoring approaches is set forth in the Solar Manual.

- 13 • **Cost Factors Analysis (60%).** Based on the bid price, proposals were awarded  
14 up to 60 points, with the lowest-cost bid receiving 60 points and other bids scored  
15 based on their cost in relation to the lowest cost bid. For each \$1/MWh each  
16 Proposal's bid price was above that of the lowest cost proposal, 4 points were  
17 deducted, subject to a minimum possible score of zero. The final set of bid prices  
18 were used to develop the Cost Score for each proposal which ranged from 16.0 to  
19 60.0

- 20 • **Non-Cost Factors Analysis (15%).** Navigant, with input from AEP Ohio,  
21 evaluated a number of non-cost factors set out in the RFP to determine the  
22 viability of the Proposal and its risks to AEP Ohio. Proposals were awarded up to  
23 15 points. These factors included, among others, terms and conditions of the

proposal, exceptions to the Form REPA and Form Term Sheet, the bidder's financial wherewithal, and the bidder's experience. As part of the scoring phase, key REPA exceptions were further evaluated. Bidders with tentative scores high enough to remain under consideration were offered opportunities to accept threshold REPA terms to which exceptions had been made. Based on Navigant's evaluation, the individual proposal scores ranged from 7.5 to 12.0.

- **Economic Preference Factors (25%).** Consistent with the Stipulation, AEP Ohio preferred projects that create permanent manufacturing jobs in AEP Ohio's service territory in Appalachian Ohio. Accordingly, up to 25 points were awarded by Navigant based on the project's creation of permanent, new manufacturing jobs in AEP Ohio's service territory in Appalachian Ohio. A maximum of 8 points was awarded if the Project yielded 1 (new) FTE per MW of Project size. A maximum of 8 points was awarded if the Project yielded an annual payroll of \$15,000 per MW for the new FTE. For those Projects achieving a minimum FTE/payroll per MW threshold:
  - Up to 2 points were awarded for presenting a specific and credible manufacturing and construction jobs program.
  - Up to 2 points were awarded for providing significant evidence that demonstrates the project will confer benefits to retail ratepayers and their communities that will persist after the initial orders for the project are completed.
  - Up to 5 points were awarded if the proposer did not take exceptions to the REPA with respect to the job and payroll commitments in REPA Section 8.2.

1 Based on Navigant's evaluation, one of the 13 proposed projects received an Economic  
2 Preference score of 22.5, one received a score of 2.7, and the others received a zero score.

3 **Q. CAN YOU DESCRIBE THE SELECTION OF THE SHORT LIST DURING THE**  
4 **EVALUATION STAGE OF THE SOLAR RFP PROCESS?**

5 A. To create the Short List, Navigant ranked each proposal by total combined score. As the  
6 Short List was developed using each proposals' total combined scores, alternative  
7 reduced MW size proposals were requested from two bidders (Bidder 3 and Bidder 6)  
8 that had proposals with a high total combined score, but a relatively large MW proposal  
9 size. These alternative sized proposals were requested to provide additional opportunities  
10 to optimize the set of bids that could encompass the maximum 400 MW portfolio that can  
11 be procured. In response to these requests, four reduced MW sized proposals (Proposals  
12 14 through 17) were received from these two bidders. Only one proposal from each of  
13 these two bidders (Bidder 3 and Bidder 6) could ultimately be contracted. These reduced  
14 MW size proposals were then scored using the same criteria used to score all other  
15 proposals. Two proposals, one from Bidder 3 and one from Bidder 6, comprising 400  
16 MW in total were then selected for the Short List.

17 Per the RFP, if not already included, proposals with the highest economic  
18 preference factor scores were to be automatically added to the Short List for further  
19 consideration. However, inclusion of additional proposals on the Short List was not  
20 required as the only bidder with a significant economic preference score had a high total  
21 combined score. for the Short List Scoring Sheet contains the scoring details for the bids  
22 but is confidential and can be provided, upon request, through discovery to parties that  
23 execute an appropriate protective agreement.

1 **Q. CAN YOU DESCRIBE THE CONCLUSION STAGE OF THE SOLAR RFP**  
2 **PROCESS?**

3 A. AEP Ohio, in consultation with Navigant, conducted further discussions and negotiations  
4 with the two Short-Listed bidders, and selected proposals to be awarded that are reliable,  
5 feasible, provide economic development for Appalachian Ohio and communities served  
6 by AEP Ohio, and represent the least reasonable cost means of satisfying the  
7 requirements of the Solar RFP consistent with the PUCO Decision.

8 **Q. WAS THE SOLAR RFP PROCESS FAIR AND COMPETITIVE?**

9 A. Yes. Procedures were in place and followed throughout the Solar RFP process to ensure  
10 a fair and competitive outcome, and numerous bidders responded to the RFP with  
11 proposals with aggregate capacity far in excess of the amount requested. The outcome is  
12 fair and competitive, with no undue preference provided to any bidder.

13 **Q. CAN YOU DESCRIBE THE EARLIER VERSION OF THE SOLAR RFP THAT**  
14 **WAS ISSUED IN DECEMBER 2016 AND TERMINATED IN JULY 2017?**

15 A. As noted above, an initial version of the Solar RFP was issued on December 16, 2016.  
16 Proposals were received on February 16, 2017. After review of the proposals, Navigant,  
17 acting as the Independent Evaluator, in conjunction with AEP Ohio, concluded that the  
18 RFP had not provided sufficient guidance to potential bidders on the proposal evaluation  
19 scoring method that would be applied, in particular the method used to score economic  
20 preference factors. The price adjustment factor for meeting the target jobs commitment  
21 was not precisely specified in the RFP. Proposals received that included the jobs  
22 commitment were generally higher in price in contrast to those that did not. Selecting  
23 short-listed bids would require adjusting pricing for a jobs commitment, and the scoring



1        used for adjusting pricing would not have been available to bidders in formulating their  
2        pricing proposals. Therefore, the decision was made to cancel the RFP and reissue it after  
3        developing an evaluation and selection scoring methodology for the economic preference  
4        factors. As a result, in July 2017, the initial version of the Solar RFP was terminated, and  
5        work began on preparing the Solar RFP that was issued in October 2017 and described in  
6        detail in this testimony.

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

8        **A.       Yes, it does.**

## **EDUCATIONAL AND PROFESSIONAL BACKGROUND**

### **Daniel Bradley**

#### Occupation

Title: Managing Director

Company: Navigant Consulting, Inc.

Business Address: 98 San Jacinto Blvd., Suite 900, Austin TX 78737

Telephone: 512-493-5400

Email: dan.bradley@navigant.com

#### Professional History

Navigant, Inc. (2001+)

GoCargo.com (2000-2001)

Navigant, Inc. (1999-2000)

Maersk Inc. (1995-1998)

Chu & Gassman Consulting Engineers (1992-1994)

#### Education

M.B.A., Clemson University, Clemson SC (1999)

B.A., Rutgers University, New Brunswick, NJ (1995)

Mr. Bradley, Managing Director in Navigant Consulting Inc.'s Energy Practice, has over 17 years' experience with Navigant in the electric power industry. Representing investor-owned utilities and municipal entities he has advised clients on procurement, resource planning, and power and renewable markets. Mr. Bradley has advised clients on the design of competitive

solicitations including solicitations that anticipate an affiliate transaction. Mr. Bradley has analyzed and modeled sections of electric resource plans and integrated resource plans. Mr. Bradley has served as a client representative in the PJM RTO stakeholder process and in the development of the PJM RPM capacity market design and in subsequent FERC settlement conferences.

### Relevant Professional Experience

#### Procurement and Contracts

- For Duke Energy, Mr. Bradley served as director in charge of an engagement to prepare support the design of a competitive procurement process as required by North Carolina HB 589, which was signed into law by Governor Roy Cooper on July 27, 2017. HB 589 requires Duke Energy to competitively procure 2,660 MW (+) of solar over 45 months.
- For Consumers Energy Company, Mr. Bradley and a colleague served as the Independent Monitor and Evaluator (IME) for a 2017 Asset Acquisition Request for Proposals for the acquisition of an existing generating facility. Navigant, as IME, finalized the terms of the RFP and related documents such as the internal evaluation procedures manual, implemented the solicitation process, evaluation of the bids received.
- For Con Edison, Mr. Bradley served as director in charge of the "BQDM" Auction. Services included designing, conducting, and managing an online auction process to create a competitive market for Distributed Energy Resource (DER) solutions.
- For JCP&L, Atlantic City Electric and Orange & Rockland utilities, Mr. Bradley served as the Solicitation Manager for the program to run the solicitation process for

qualifying applicants, including advertising the availability of the program, establishing a process for bid submittal and ranking the projects. Solicitation Manager responsibilities included finalized the terms of the RFP and related documents, implemented and managed 9 solicitation processes with input from the utilities over a 36 month period. Mr. Bradley submitted a confidential reports to the New Jersey Board of Public Utilities for each solicitation that summarized the solicitation activity, assessed the competitiveness of the process and made recommendations for award.

- Over an eleven-year period, Mr. Bradley served on or led Navigant's engagement team on numerous solicitation processes for the Long Island Power Authority ("LIPA"), a rate authority of the State of New York. Such engagement activities included: developing the request for proposal, coordinating communications with prospective proposers during the submittal process, analyzing and evaluating proposals, briefing LIPA's trustees on recommendations for selection, negotiating contracts with successful proposers, obtaining approval of said contracts with the New York State Attorney General and Comptroller, and conducting public and news briefings on the resulting contracts. Solicitations included:
  - RFP for Renewable Energy – seeking delivery of renewable energy from solar and wind projects,
  - RFP for Generation and Transmission – seeking up to 2,500 MW of Generation and/or Transmission,
  - RFP for Off-Island Capacity and/or Energy – seeking up to 990 MW of capacity and/or energy over its HVDC cables from the PJM and ISO-NE markets,

- RFP for Generation and/or Transmission – seeking up to 1000 MW of capacity and/or transmission.
- For BC Hydro, Mr. Bradley served as engagement manager of the Navigant team in conducting a risk-based financial analysis for BC Hydro to assess the impact of changes its Energy Purchase Agreement in an effort to achieve a better balance of costs and benefits to ratepayers and less risk to the renewable suppliers. Navigant used its risk-based financial model to measure the changes in risk to suppliers and the change in cost to ratepayers and was used to develop an actionable set of recommendations to BC Hydro to consider to make future renewable power calls more competitive.
- Mr. Bradley serves as the Navigant engagement manager and Independent Evaluator to the FirstEnergy Ohio Utilities regulated renewable procurements seeking Renewable Energy Credits and Solar Renewable Energy Credits for compliance with its obligations under Ohio law.
- For PECO, an Exelon Company, Mr. Bradley was the Navigant engagement manager and Independent Monitor to on a series of renewable procurements from 2007-2012 seeking Alternative Energy Credits and Solar Alternative Energy Credits for compliance with its obligations under Pennsylvania state law.

# **American Electric Power Service Corporation**

**as agent for**

## **Ohio Power Company**

**doing business as**

## **AEP Ohio**

### **Request for Proposals**

**Totaling up to 400 MW of nameplate rated**

**Solar Energy Resources (Ohio projects only)**

**(50 MWac minimum bid size)**

**RFP Issued**

**October 18, 2017**

**Proposals Due**

**December 18, 2017 (3:00 p.m.)**

**Web Address: <http://www.aepohio.com/go/rfp/>**

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## 1. Purpose and Scope

- 1.1. American Electric Power Service Corporation (AEPSC) and AEP Ohio (Company, AEP Ohio) are subsidiaries of American Electric Power Company, Inc. (AEP). AEPSC is administering this AEP Ohio Request for Proposals (RFP) on behalf of AEP Ohio.
- 1.2. In accordance with a March 31, 2016 Opinion and Order and a November 3, 2016 Second Entry on Rehearing (collectively, “Decision”) issued by the Public Utilities Commission of Ohio (PUCO, Commission) in Case No. 14-1693-EL-RDR, a Joint Stipulation and Recommendation (“Stipulation”) was approved with certain conditions and requirements as set forth therein. AEP Ohio, as part of the Stipulation is committed to propose new renewable projects in the state totaling 500 MW from wind energy resources and 400 MW from solar energy resources. AEP Ohio or AEP affiliates will have the right to own up to 50% of such projects on an aggregate net basis. Proposed renewable energy projects will be subject to separate application by AEP Ohio for approval by the Commission. In addition, preference will be given to solar projects that:
  - Are substantially located in AEP Ohio’s service territory in Appalachian Ohio<sup>1</sup>,
  - Create permanent manufacturing jobs in Appalachian Ohio, and
  - Commit to hiring Ohio military veterans.
- 1.3. AEP Ohio is requesting bids in this RFP which will result in obtaining up to approximately 400 MW of nameplate rated Solar Energy Resources (Solar Project, Project). Proposals will be evaluated based on price as well as non-price criteria in combination, including which Proposals best satisfy the preferences set forth in the Stipulation. Proposals must also be structured to satisfy the proposal requirements set out in Section 2 of this RFP.
- 1.4. Each Proposal needs to be implemented in a manner to ensure that AEP Ohio “owns or operates the generation plant” for purposes of Section 4928.143(B)(2)(c) of the Ohio Revised Code, including but not necessarily limited to, AEP Ohio being the market participant for the generation plant under PJM rules. Bidders should assume that AEP Ohio will be the operator.
- 1.5. Bidders interested in submitting a Proposal into this RFP will be required to execute a Confidentiality Agreement prior to receiving the Form Renewable Energy Purchase

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<sup>1</sup> For purposes of this RFP, Appalachian Ohio means those Ohio counties identified by the Appalachian Regional Commission as being within the Appalachian Region of Ohio (<https://www.arc.gov/counties>): Adams, Ashtabula, Athens, Belmont, Brown, Carroll, Clermont, Columbiana, Coshocton, Gallia, Guernsey, Harrison, Highland, Hocking, Holmes, Jackson, Jefferson, Lawrence, Mahoning, Meigs, Monroe, Morgan, Muskingum, Noble, Perry, Pike, Ross, Scioto, Trumbull, Tuscarawas, Vinton, and Washington. AEP Ohio’s service territory includes all Appalachian Ohio counties except Ashtabula, Trumbull, Mahoning and Clermont counties.



Agreement (“REPA”), Form Term Sheet or the AEP Solar Generation Facility Standard (Section 4.3).

- 1.6. This inquiry is not a commitment to purchase and shall not bind the Company or any affiliates of the Company in any manner. The Company in its sole discretion will determine with which Bidder(s), if any, it wishes to engage in negotiations that may lead to a binding contract.
- 1.7. AEP has retained Navigant Consulting (“Navigant”) to assist AEP Ohio in managing the RFP, including development of the RFP, collaborating with AEP on the criteria for evaluation of the price and non-price terms of Proposals, selecting the short list of Proposals for final evaluation, and overseeing the final selection of Proposal(s) that best fit the evaluation criteria.
- 1.8. The Company may execute one or more REPAs totaling up to approximately 400 MW of nameplate rated Solar Energy resources as a result of this RFP. The Company reserves the right to increase or decrease the total number of MW executed as a result of this RFP. The minimum nameplate bid size for this RFP is 50 MWac. Bidders may aggregate multiple sites in a single Proposal (with a single Bid Price) in order to satisfy the minimum bid size, provided that the minimum size for any site in an aggregation group is 10 MWac.
- 1.9. Affiliates of AEP (“Affiliate”) will be permitted to participate in this RFP. If Affiliate Proposals are offered, they will (i) be submitted in the same format and under the same rules, (ii) be evaluated in the same manner, and (iii) use the same Form REPA or Form Term Sheet as a basis for contract negotiations.
- 1.10. Affiliate Proposals will be treated with the same objective, arm’s length dealing as third-party (non-Affiliate) Proposals. Appropriate procedures and Code of Conduct Policy are in place to safeguard against Affiliates receiving undue preferential treatment or preferential access to information. In addition to using a Code of Conduct Policy, Navigant will help ensure consistency and fairness of the RFP process.
- 1.11. The Company’s decision regarding the results of the RFP will be subject to regulatory approval from the Public Utilities Commission of Ohio (“Commission”). The Company will file an EL-RDR application for each Project to obtain Commission approval for any cost recovery in advance of the commencement of construction of each Project. Any contractual arrangements between the Company and prospective Bidders will be conditioned upon prior Commission approval that is satisfactory in form and substance to the Company in its sole discretion. The Company reserves the right to reject any proposed contracts that result from the RFP if subsequently issued regulatory approval or authorization is subject to conditions, including ratemaking treatments, which are unacceptable to the Company, in its sole discretion.

1.12. All capitalized terms used but not defined in this RFP will have the meanings given to them in the Form REPA attached as Appendix E. References to any laws, regulations or tariff provisions will be deemed to refer to such laws, regulations or tariff provisions as they may be amended, superseded or supplemented in the future.

1.13. All questions regarding this RFP should be emailed to:

[aepohsolar@navigant.com](mailto:aepohsolar@navigant.com)

Navigant in consultation with the Company will post a list of non-confidential “Questions and Answers” at the AEP Ohio website weekly following the issuance of the RFP until the Proposal Due Date.

**2. Proposal Specifications.** AEP Ohio is requesting bids in this RFP which will result in obtaining up to approximately 400 MW of nameplate rated Solar Energy Resources (Solar Project, Project) through a Renewable Energy Purchase Agreement (REPA) of 20 years in duration. As set out in the REPA, AEP Ohio will purchase the renewable energy products (energy, capacity, ancillary services and environmental attributes) generated or associated with the facility. All Proposals must conform to the option set forth in Section 2.1 and also satisfy the Project criteria set forth in Sections 2.2 through 2.9.

**2.1. Solar Project Equity Option.** All Proposals must also contain an option to purchase 50% of the equity interests in the Project, at completion, by AEP Ohio or an AEP Affiliate, provided, however that this obligation does not apply to any Proposal in which an AEP Affiliate has a pre-existing interest.

**2.2. Size.** Solar Projects must have a minimum nameplate rating of 50 MWac. Bidders may aggregate multiple sites in a single Proposal (with a single Bid Price) in order to satisfy the minimum bid size, provided that the minimum size for any site in an aggregation group is 10 MWac.

**2.3. New Build.**

2.3.1. Project construction must have started after January 1, 2016. Projects for which construction began prior to 2016 will not be eligible for this RFP.

2.3.2. National Maintenance Agreement, attached to the REPA as Exhibit O, must be utilized for the construction of the Project. The National Maintenance Agreement incorporates hiring preferences for military veterans.

2.3.3. Bidder must have secured site control of the land necessary to construct the Project at the time of submission of Proposal (See Section 8.1.7).

- 2.4. **Location.** The Project must be substantially located in AEP Ohio's service territory in Appalachian Ohio.
- 2.5. **Commercial Operation Date.** The target date for start of commercial operation is December 31, 2021. Projects are expected to meet all of the requirements to qualify for and obtain full value of the Investment Tax Credit. Failure of the Project to qualify for the Investment Tax Credit is Bidder's sole risk.
- 2.6. **Term.** The REPA term will be 20 years.
- 2.7. **Interconnection / Delivery Point.**
- 2.7.1. The Solar Project must be interconnected to the PJM RTO system.
  - 2.7.2. Bidders are responsible for following the established policies and procedures that are in effect regarding facility interconnection with the interconnecting utility and PJM.
  - 2.7.3. The Bidder is responsible for all costs associated with transmission interconnections and system upgrades as required by PJM.
  - 2.7.4. The Bidder is responsible for following the established PJM and interconnecting utility policies and procedures that are in effect regarding facility operation associated with the distribution or transmission system, as applicable.
  - 2.7.5. Bidder must have a completed PJM Feasibility Study by the RFP Proposal Due Date as outlined in Section 4 at time of submission of Proposal.
- 2.8. **Owned or Operated by AEP Ohio.** The Solar Project must be "owned or operated" by AEP Ohio to comply with AEP Ohio's proposed nonbypassable rider under R.C. 4928.143(B)(2)(c), including but not necessarily limited to, AEP Ohio being the market participant for the generation plant under PJM rules. Bidders should assume that AEP Ohio will be the operator.
- 2.9. **Preference for Hiring of Ohio Military Veterans.** All Projects must commit to hiring Ohio military veterans associated with the jobs created by the Project, including jobs associated with the manufacture of the components used by the Project and construction of the Project. The commitment to hiring military veterans may be demonstrated by participation in programs creating jobs for Ohio veterans, as specified by AEP Ohio, or in equivalent, nationally or regionally recognized programs. At a minimum, Projects must use the National Maintenance Agreement, attached to the REPA as Exhibit O, incorporating hiring preferences for military veterans.

### 3. Bid Price Structure

#### 3.1. Bid Price Structure for REPA.

- 3.1.1. All Proposals will include a Bid Price for the REPA. The Bid Price for the REPA must be for a bundled renewable energy product including Energy, Capacity, Ancillary Services and Environmental Attributes.
- 3.1.2. The Bid Price shall be on an “as-available” per MWh basis with no separate capacity payment.
- 3.1.3. All-in Price – The Bid Price must include all capital costs, fixed and variable O&M costs, taxes and any other costs associated with delivering the full contracted energy output of the facility to the bid-specified Point of Delivery.
- 3.1.4. All costs associated with interconnections and transmission, including any system upgrades, as required by PJM up to the Point of Delivery, shall be included in the Bid Price.
- 3.1.5. Bid Price must be an “all-in” around-the-clock Price on a dollar per MWh (\$/MWh) basis for the term of the REPA. The Bid Price will be a single, fixed price for the term of the REPA and will not include escalation.
- 3.1.6. The term of the REPA will be 20 years.
- 3.1.7. A Bid Price must be firm, representing best and final data.

- 3.2. **Price for the 50% Ownership Option.** All Proposals must also include a price, stated in dollars, for an option for AEP Ohio or an AEP Affiliate to purchase 50% of equity interests in the Solar Project, at the completion of the Project. The option will be exercisable within 30 days of notice from AEP Ohio that satisfactory regulatory approval has been obtained for the REPA. All option prices must be firm, representing best and final data. This obligation does not apply to any Proposal in which an AEP Affiliate has a pre-existing interest.

#### 4. RFP Schedule and Procedure

- 4.1. The following schedule and deadlines apply to this RFP. AEP Ohio reserves the right to revise this schedule at any time and at its sole discretion.
- 4.2. All Proposals must be complete in all material respects and be received no later than 3:00 p.m. EST on Monday, December 18, 2017 as specified in Section 5 of this RFP.

<b>RFP Timetable</b>	
RFP Issued	Wednesday, October 18, 2017
Confidentiality Agreement Executed	Thursday, November 30, 2017
Proposal Due Date	Monday, December 18, 2017
Final Decision	Q1 2018
Contract Execution	Q2 2018
Submit Petition Before the PUCO for Approval of Contracts	Q2 2018
Receipt of PUCO Approval and FERC Approval of Affiliate REPA (if applicable)	2019
Receipt of Satisfactory Rehearing or Appeal Decision (if applicable)	2020
Notice to Proceed	2020
COD (on or before)	12/31/2021

#### 4.3. Confidentiality Agreements

- 4.3.1. Bidders are required to execute a Form Confidentiality Agreement (CA) prior to the Company forwarding the Form REPA, Form Term Sheet or AEP Solar Generation Facility Standard to the Bidder. All information contained in these documents is Confidential Information. The CA must be executed on or before the date set forth in Section 4.2.
- 4.3.2. Bidders that have existing CAs with the Company as a result of the RFP issued on December 16, 2016 will not be required to execute a new CA; however, to participate in the RFP, the Bidder must supply the Company with the documentation outlined in Section 4.3.3.
- 4.3.3. Bidder should request the Company's Form CA by emailing to the address below and including:
- documentation that Bidder has received a completed PJM Feasibility Study (Section 2.7.5);
  - documentation demonstrating site control as required under Section 2.3.3 and Section 8.1.7; and

- documentation outlining Bidder's experience including projects of equal size to the Bidder's Proposal that Bidder completed the development, engineering, procurement, construction and commissioning.

[aepohsolar@navigant.com](mailto:aepohsolar@navigant.com)

4.4. Solicitation of Additional Information: AEP Ohio, in consultation with Navigant, reserves the right to solicit additional Proposals, if it deems necessary to do so, and the right to submit additional information requests to Bidders during the evaluation process.

4.5. Information Policy: For information regarding this RFP, visit:

<http://www.aepohio.com/go/rfp/>

## **5. Proposal Submittal**

Bidder's Proposal shall be submitted to Navigant electronically by the Proposal Due Date as outlined in Section 4.2 at [aepohsolar@navigant.com](mailto:aepohsolar@navigant.com). Hard copies are not required. Courtesy copies should not be sent electronically or in hard copy to addresses for prior AEP Ohio Solar RFPs.

## **6. Proposal Content**

- 6.1. The Bidder is encouraged to provide as much information as possible to aid in the evaluation of the offer. The Bidder should also provide any additional information the Bidder deems necessary or useful to the Company in making a definitive and final evaluation of the benefits of the Bidder's Proposal without further interaction between Navigant, the Company and the Bidder.
- 6.2. Appendix G has been provided as a check sheet for all of the information required to be included in the Bidder's Proposal package. A completed Appendix G shall be included in the Proposal package.
- 6.3. Bidder shall provide a detailed report describing its jobs program ("Jobs Program"), the name of the manufacturer(s), any executed agreements or term sheets, etc. In addition, Bidder shall provide any economic development reports associated with the addition of these manufacturers and assurances associated with new jobs and economic development.
- 6.4. Bidder shall provide an executive summary of the bid's characteristics and timeline, including any unique aspects and benefits.

- 6.5. Bidder shall complete all of Appendix A (Solar Project Summary). Please provide any PJM interconnection studies, Permits, National Maintenance Agreement and any solar resource data. Bidder shall include with its Proposal a detailed plan and target dates for obtaining Ohio Power Siting Board approval of its site(s), as applicable.

No Bidder may act through a partnership, joint venture, consortium, or other association or otherwise act in concert with any other person unless, as part of its Proposal, it provides written notification to the Company and fully identifies all partners, joint venturers, members, or other entities or persons comprising same.

- 6.6. Bidder shall complete Appendix B (Bidder's Credit-Related Information) as applicable. At the time of the execution of a REPA, all Project owners will be required to post a Security Fund in the form of cash, letter of credit, or corporate guarantee. If the Bidder intends to maintain the Security Fund through a parental guarantee, the guarantor will need to provide a complete Credit Application. Bidders with guarantors should describe any current credit issues raised by rating agencies, banks, or accounting firms. In addition, Bidders should provide any letters from banks / institutions that demonstrate the ability of the Bidder's guarantor to successfully finance the Project.
- 6.7. Bidder shall complete Appendix C (Bidder Profile) as applicable. Bidder shall provide a general description of the Bidder's background and experience in universal scale solar 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 solar 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 similar to the one proposed to AEP Ohio. If the Bidder has fewer than three projects, it shall provide as many references as possible.
- 6.8. Bidder shall submit an Appendix D (Finance Plan) on a separate form. 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 operation.
- 6.9. Bidder shall fully describe any exceptions it takes to any terms and conditions of the Form REPA.
- 6.10. Bidder shall provide information showing that it has substantial experience in developing, engineering, procuring equipment, constructing and commissioning solar powered electric generation facilities (> 10 MWac) in the United States or any portion of Canada within the jurisdiction of NERC.



6.11. Bidder must provide documentation showing Bidder's experience in operating and maintaining solar powered electric generation facilities (> 10 MWac) in the United States or any portion of Canada within the jurisdiction of NERC, and (ii) meet all applicable requirements under applicable law for operating and maintaining the solar farms, including the requirements of an RTO / ISO. A Bidder will be deemed to have such substantial experience if it is a Bidder that has at least three (3) years of experience in operating and maintaining solar powered electric generation facilities (> 10 MWac) in the United States or any portion of Canada within the jurisdiction of NERC.

6.12. **Additional Information Related to 50% Ownership Option.** The obligation to submit a 50% ownership option and information related thereto applies to all Proposals except for Proposals in which an AEP Affiliate has a pre-existing interest. In addition to the information required by Sections 6.1 – 6.11, Bidders obligated to submit a 50% ownership option will also provide the following:

6.12.1. Bidder shall provide a detailed information regarding the proposed equipment, EPC contractor selected and equipment warranty documentation.

6.12.2. Bidder shall provide a detailed draft equity purchase term sheet using the form Term Sheet attached as Appendix F.

## 7. Treatment of Proposals

7.1. The Company reserves the right, without qualification, to select or reject any or all Proposals and to waive any formality, technicality, requirement, or irregularity in the Proposals received.

7.2. The completed Appendices and any supplemental information submitted by the Bidder may be utilized in any filings with regulatory agencies.

7.3. Bidders that submit Proposals do so without recourse against the Company for either rejection by the Company or failure to execute an agreement for purchase of capacity and/or energy for any reason.

## 8. RFP Proposal Evaluation

Navigant and the Company will consider bids that are reliable, feasible and represent the reasonable cost means of satisfying the requirements of this RFP consistent with the PUCO Decision.

The Evaluation Process, which includes four main steps (see below), is central to the success of the Company's RFP process.



- (1) Eligibility and Threshold Requirements
- (2) Cost, Non-Cost and Preference Factors Evaluation Phase
- (3) Selection of Short List Bids
- (4) Selection of Award Group and Notification

During the evaluation process, the identity of Bidders submitting Proposals will remain confidential. In order to ensure that all Proposals, including Proposals from Bidders affiliated with the Company, are evaluated fairly and impartially, the Company will not be informed of the identity of Bidders until after the Short List of Bids has been selected. Navigant, as the Independent Evaluator, will be involved in all phases of the Evaluation Process to ensure that the process and selection of the Award Group is fair and transparent, not preferential, satisfies the requirements of this RFP, and is consistent with the PUCO Decision.

After the Proposal Due Date, Navigant will review all responses for completeness, responsiveness and compliance with the Proposal Specifications in Section 2 of this RFP and the Eligibility and Threshold Requirements in Section 8.1. As a result of this screening, Navigant may either eliminate bid(s) from further consideration, or contact Bidder(s) to clarify information or request additional information. Navigant will make such requests in writing via email and Bidders will be required to respond to the request within five (5) business days of receipt of such request or Navigant may choose to stop evaluating a Bidder's Proposal.

While evaluating Proposals, Navigant 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 five (5) business days of receipt of such request or Navigant may choose to stop evaluating the Bidder's Proposal.

**8.1. Eligibility and Threshold Requirements.** All Proposals must conform to each of the Proposal Specifications set forth in Sections 2.1 through 2.9, the minimum criteria set forth in Sections 8.1.1 – 8.1.11, below, and the Proposal contents must be complete in accordance with Section 6. Navigant will perform the initial review of all Proposals to identify if any Proposal does not satisfy these minimum criteria. Each Bidder will be notified by Navigant of any Proposal submitted by that Bidder does not qualify for this RFP.

- 8.1.1. Project must have a minimum nameplate rating of 50 MWac in the aggregate from one or more sites, provided that the minimum size for any site in an aggregation group is 10 MWac.
- 8.1.2. The Delivery Period of the REPA is 20 years.
- 8.1.3. Bidder must commit to using the National Maintenance Agreement.
- 8.1.4. Bidder must commit to hiring Ohio military veterans as set forth in Section 2.9. At a minimum, Bidder must use the National Maintenance Agreement which incorporates hiring preferences for military veterans.

- 8.1.5. Project must be substantially located in AEP Ohio's service territory in Appalachian Ohio.
- 8.1.6. Bidder must have established site control of the proposed Project. Site Control is established in the form of direct ownership or Lease Option. A letter of intent will not qualify the proposed Project under this Section 8.1.7.
- 8.1.7. Project must have an estimated commercial operation date of no later than December 31, 2021.
- 8.1.8. Bidder must have received a completed PJM Feasibility Study prior to submission of its Proposal.
- 8.1.9. Proposal must ensure that AEP Ohio owns or operates the generation plant for purposes of Section 4928.143(B)(2)(c) of the Ohio Revised Code, including but not necessarily limited to AEP Ohio being the market participant for the generation plant under PJM rules. Bidders should assume that AEP Ohio will be the operator.
- 8.1.10. Bidder shall have completed the development, engineering, equipment procurement and construction of a solar project within the United States or Canada of 10 MWac or greater.

**8.2. Cost, Non-Cost and Preference Factors Evaluation Phase.** During this phase, Navigant will evaluate the Cost Factors, Non-Cost Factors and Ohio Economic Preference Factors to identify the Proposals with the best combination of value, risk and economic and job growth for AEP Ohio's customers and the region. The Ohio Economic Preference Factors will be a significant component of the overall evaluation of each Proposal.

Each of the three factors will be evaluated by Navigant using a scoring system that takes into account the contribution of each factor to the overall value of the Proposal.

- Cost Factors (60%)
- Non-Costs Factors (15%)
- Ohio Economic Preference Factors (25%)

This approach will assist in giving each of the factors the appropriate weight and allow Navigant to compare Proposals objectively and fairly. As set forth below, Proposals will be evaluated using a 100-point scale. The scores will be added to determine each Proposal's Total Combined Score.

AEP Ohio will provide input to Navigant during the Evaluation Phase, however, Navigant will mask Bidders' identities from AEP Ohio in order to ensure fairness.

- 8.2.1. **Cost Factors Analysis (60%).** Navigant, with input from AEP Ohio, will determine (i) the Levelized Cost of Electricity (LCOE) and (ii) the Levelized Impact on AEP Ohio Net Revenue Requirement (Net Revenue Requirement) associated with each Proposal. Proposals will be awarded up to 60 points, with the lowest-cost bid receiving 60 points and other bids scored based on their cost in relation to the lowest cost bid. The minimum score is 0 points.
- 8.2.2. **Non-Cost Factors Analysis (15%).** Navigant, with input from AEP Ohio, will consider all applicable factors including, but not limited to, the factors set out below to determine the viability of the Proposal and its risks to AEP Ohio. Proposals will be awarded up to 15 points. The minimum score is 0 points.
- 8.2.2.1. The terms and conditions of the Proposal.
  - 8.2.2.2. Environmental / Wildlife impact.
  - 8.2.2.3. Exceptions to the Form REPA and Form Term Sheet.
  - 8.2.2.4. Bidder's financial wherewithal.
  - 8.2.2.5. Bidder's experience.
  - 8.2.2.6. Proposed date of commercial operation (on-line).
  - 8.2.2.7. Project Size (MW).
  - 8.2.2.8. Financing plan.
  - 8.2.2.9. The operating history of Bidder's other similar generation facilities.
  - 8.2.2.10. The degree of risk as to the availability of the power or the resources in the timeframe proposed.
- 8.2.3. **Economic Preference Factors (25%).** Consistent with the Stipulation, AEP Ohio further prefers Projects that create permanent manufacturing jobs in AEP Ohio's service territory in Appalachian Ohio to further benefit AEP Ohio's customers and communities. Accordingly, up to 25 points will be awarded based on the Project's creation of permanent, new manufacturing jobs in AEP Ohio's service territory in Appalachian Ohio. The minimum score is 0 points. The awarding of points will emphasize the creation of permanent jobs and additional manufacturing base in the Appalachian Ohio communities served by AEP Ohio. Any

Project lacking a credible implementation plan for the creation of jobs in Appalachian Ohio will receive zero points for this item.

- i. The jobs must be directly related to (i) solar component manufacturing (e.g., module, tracker, inverter, and balance of plant manufacturing) and (ii) construction of the Project. A specific credible manufacturing and construction Jobs Program must be provided in the Proposal as further described in Section 6.3.
- ii. Bidder's detailed jobs implementation plan will demonstrate how retail ratepayers and their communities obtain net benefits from the jobs created by Bidder's Proposal. Bidder will explain how it will ensure that the manufacturers included in its plan will continue operations in AEP Ohio's service territory in Appalachian Ohio after the initial orders for the Project are completed.
- iii. An audited report would be required at the commercial operation date and each year for the first five (5) years of the Delivery Period assessing the number of manufacturing as well as construction jobs created.
- iv. Points will be awarded based on (1) the number of permanent jobs created up to certain job creation limits and (2) the total estimated payroll of the created jobs. Additional factors may be considered if appropriate based on the structure of the Jobs Program.
- v. The AEP Ohio Form REPA has been updated (Section 8.2) to include a reduction of Contract Price (\$/MWh) if the jobs commitment is not met. If the job commitment in any accepted Bid is not met in full in any year during the term of the jobs commitment, including prior to COD if applicable, a deduction in Contract Price (\$/MWh) for the new and subsequent Contract Years of up to 25% will be made. The amount deducted will be proportionate to the amount of the shortfall from that jobs commitment (as measured by the number of jobs, amount of payroll and/or other relevant job metrics as more fully set forth in the REPA).
- vi. The annual REPA assessment for job commitment shortfalls is set forth in Section 8.2 of the form REPA attached as Appendix E. Comments on Section 8.2 of the REPA and related definitions and sections will be taken into account in scoring this criteria. Proposed REPA edits, exceptions and comments that weaken the job commitment may result in point deductions.

- vii. The term of the jobs commitment is the period from satisfaction of Seller's conditions precedent through and including the 5<sup>th</sup> year of the start of the Delivery Period.

- 8.3. **Short-List.** Navigant will rank each Proposal by Total Combined Score and by its score for the Ohio Economic Preference Factors. Analysis of the Cost Factors will consider the REPA Bid Price, and the Proposals selected for the Short-List will be the Projects with the highest Total Combined Score. In addition, if not already included, Proposals with the highest Economic Preference Factor scores will automatically be added to the Short List for further consideration.

Bidders whose Proposals are not selected to the Short-List will be notified promptly. The Company will engage in further discussions and negotiations with the Short-Listed Bidders for one or more executable agreements.

- 8.4. **Award Group.** From the Short-Listed Proposals, the Company, in consultation with Navigant, and based on its further discussions and negotiations with the Short-Listed Bidders, will select Proposals for the Award Group that are reliable, feasible, provide economic development for Appalachian Ohio and communities served by AEP Ohio, and represent the least reasonable cost means of satisfying the requirements of this RFP consistent with the PUCO Decision. Bidders whose Proposals are not selected to the Award Group will be notified promptly.

## 9. Confidentiality

- 9.1. AEP Ohio and Navigant 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. AEP Ohio and Navigant reserve the right to release any Proposals to agents or consultants for purposes of Proposal evaluation. This disclosure policy 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, AEP Ohio and Navigant will make all reasonable efforts to protect Bidder's confidential information.

## **10. Bidder's Responsibilities**

- 10.1. Proposals and bid pricing must be valid for at least (90) days after the Proposal Due Date, upon which time Proposals shall expire unless the Bidder has been notified and selected as a Short-Listed Bidder or as a final award recipient.
- 10.2. It is the Bidder's responsibility to submit all requested material by the deadlines specified in this RFP.
- 10.3. The Bidder should make its Proposal as comprehensive as possible so that the Company may make a definitive and final evaluation of the Proposal's benefits to its customers without further contact with the Bidder.
- 10.4. 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.
- 10.5. The Company and Navigant shall not be liable for any direct or indirect expenses or lost opportunity costs Bidders incur in connection with the preparation and submission of a Proposal and/or any subsequent negotiations regarding a Proposal in response to this RFP. Neither Company or Navigant will reimburse Bidders for their direct or indirect expenses or lost opportunity costs under any circumstances, regardless of whether the RFP process proceeds to a successful conclusion or is abandoned by the Company at its sole discretion.

## **11. Contacts**

All questions regarding this RFP should be submitted to the RFP Email Address ([aepohsolar@navigant.com](mailto:aepohsolar@navigant.com)). All relevant questions and answers will be posted on the RFP website on a periodic basis. Other than questions and answers submitted through the RFP Email Address and posted on the RFP website, no other explanations or interpretations of this RFP will be given. Written questions will be accepted by Navigant until five (5) days before the date on which Proposals are due. The Bidder should check the RFP website periodically for updates and postings.

In the event that a given Bidder has a question or seeks clarification or explanation of any data or information provided in this RFP, such Bidder is responsible for obtaining the desired information by submitting a written question to Navigant through the RFP Email Address by no later than five (5) days before the date on which Proposals are due.

Any and all communications regarding this RFP will be submitted through the RFP Email Address, or posting on the RFP website. Under no circumstance should Bidders attempt to contact AEP Ohio or Navigant employees directly with any matters related to this RFP.

## Appendix A

### Solar Project Summary

*Note that completion of ALL information is required*

#### *Company Information*

Bidder (Company):		
Contact Name:		
Contact Title:		
Address:		
City:	State:	Zip Code:
Work Phone:	Cell Phone:	
Email Address:		

#### *General Project Information*

Project Name:		
Unique Bid Name:		
Is Project site located in AEP Service Territory in Appalachian Ohio (Y/N):		
Interconnection Path (select all that apply)	AEP Ohio (Y/N):	PJM (Y/N):
Interconnecting Utility:		
EPC Contractor:		
Estimated Commercial Operation Date:		
Nameplate (MWac):	Expected Annual Availability (%):	
Nameplate (MWdc):		
Expected Capacity Factor (%):	Expected Annual Energy (MWh):	
Annual Degradation (%):	Fixed Tilt or Single Axis Tracking:	
<p>Describe how the Proposal will ensure that AEP Ohio owns or operates the generation plant for purposes of Section 4928.143(B)(2)(c) of the Ohio Revised Code, including but not necessarily limited to AEP Ohio being the market participant for the generation plant under PJM rules. Bidders should assume that AEP Ohio will be the operator.</p>		

***Bid Pricing “REPA” (20 Year Term)***

<b>Fixed Bid Pricing</b>	<b>Price</b>
Delivery Period Start: 12/31/2021 (\$/MWh)	\$ / MWh
Delivery Period Start (Other) (\$/MWh)	\$ / MWh

***50% Equity Purchase Option (See Note 1)***

<b>Bid Pricing</b>	<b>Price</b>
Closing Date (12/31/2021): 50% Asset Purchase Option (\$)	\$
Delivery Period Start (Other): 50% Asset Purchase Option (\$)	\$

*Note 1: For the Equity Purchase Option, attach additional sheets as necessary to fully articulate the equity purchase option; including a draft equity purchase term sheet using the form attached as Appendix F.*



### ***Equipment Manufacturer Selection***

<b>Item</b>	<b>Mfg &amp; Model</b>	<b>Location of Mfg.</b>
Solar Panels		
Inverters		
Racking		
<p>If the Solar Panel or Inverter manufacturers have not been finalized, describe where the Bidder is in the selection process including all manufacturers and models being evaluated, timing of final selection, etc.</p> <p>Please attach all warranties associated with the Solar Panels and the Inverters (Asset Purchase Options only).</p>		

### ***Site Information***

Site Legal Description:		
Address:		
City:	State:	Zip Code:
County	Longitude:	Latitude:
Site Control (lease, own, site purchase pending, etc.):		
Site Acres:		
Is there potential for expansion (Y / N):		If Yes; acres available:
Are additional acres available:		
Please attach a copy of all leases, easements or other ownership documentation.		
Has the site been assessed for any environmental contamination (Y / N):		
Describe any known environmental issues; or any expected impacts to the environment or wildlife. If necessary, please describe on a separate attachments:		
Please attach a diagram identifying anticipated placement of major equipment and other Project facilities, including interconnection to PJM.		

### ***Interconnection and Point of Delivery (PJM)***

PJM Queue #:	Substation Name / Voltage:
Feasibility Study Complete (Y/N):	Feasibility Study Report Date:
System Impact Study Complete (Y/N):	System Impact Study Report Date:
Point of Interconnection with :	
PJM Interconnection Status (describe):	
<i>Please attach a copy of all interconnection studies and/or the expected completion date(s).</i>	

### ***Permits***

Bidder shall include with its Proposal a detailed plan and target dates for obtaining Ohio Power Siting Board approval of it site(s), as applicable.

Have you contacted all required permitting agencies regarding this Project and identified all necessary permits?

City (Y / N):

County (Y / N):

State (Y / N):

Federal (Y / N):

- USF&W (Y/N):

Other (Y / N):

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 timeline.

### ***Solar Resource Data***

1. Proposal must provide the source and basis of the solar irradiance data used in the development of energy projections for the Project. Explain all assumptions used in forecasted generation calculations.
2. Attach an 8760 calendar year hourly energy forecast, net of all losses (See ***Energy Input Sheet*** below).

Consulting Meteorologist Information:

Name:

Address:

Email:

Contact Number:

Please attach the resume of this consulting meteorologist.

### ***Energy Input Sheet***

(See attached Excel spreadsheet)

### ***Ohio Preferences***

Describe Bidder's Jobs Program as set forth in Section 8.2.3 of the RFP and how the Bidder will support the initiative of creating permanent manufacturing jobs in AEP's service territory in Appalachian Ohio. *Please attach additional sheets as necessary to fully describe the Bidder's implementation plan.*

Describe how the Bidder will support the initiative to "Commit to hiring Ohio military veterans". *Please attach additional sheets as necessary to fully describe the Bidder's implementation plan.*

Describe in detail how the Bidder will be using local goods or services sourced whole or in part from one or more Ohio businesses to the extent practical in the purchase of equipment and material, or services for the Project. *Please attach additional sheets as necessary to fully describe the Bidder's implementation plan.*

### ***Solar Projects Completed***

Provide a summary of all solar projects ( $\geq 10$  MWac) that Bidder has successfully developed and completed in the United States or Canada. For each project, describe the Bidder's specific role in the project.

Project	Location	MW	Bidder's Role
Total MW =			

Please provide a summary of the operating history of previously built solar projects ( $>10$  MWac), if necessary, provide in a separate attachment:

## Appendix B

### Bidder's Credit-Related Information

Full Legal Name of the Bidder:
Type of Organization (Corporation, Partnership, etc.):
Bidder's % Ownership in Proposed Project:
Full Legal Name(s) of Parent Corporation: 1. 2. 3.
Entity Providing Credit Support on Behalf of Bidder (if applicable): Name: Address: City: Zip Code:
Type of Relationship:
Current Senior Unsecured Debt Rating: 1. S&P: 2. Moodys:
Bank References & Name of Institution:
Bank Contact: Name: Title: Address: City: Zip Code: Phone Number:
Legal Proceedings: As a separate attachment, please list all lawsuits, regulatory proceedings, or arbitration in which the Bidder or its affiliates or predecessors have been or are engaged that could affect the 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.
Financial Statements: Please provide copies of the Annual Reports for the three most recent fiscal years and quarterly reports for the most recent quarter ended, if available. If available electronically, please provide link:

## Appendix C

### Bidder Profile

Please list Bidder's Affiliate companies:

- 1.
- 2.
- 3.
- 4.

*Please attach a summary of Bidder's background and experience in Solar Energy projects.*

#### References

1. Company
  - a. Contact Name:
  - b. Contact Number:
  - c. Project:
2. Company
  - a. Contact Name:
  - b. Contact Number:
  - c. Project:
3. Company
  - a. Contact Name:
  - b. Contact Number:
  - c. Project:
4. Company
  - a. Contact Name:
  - b. Contact Number:
  - c. Project:

# Appendix D

## Financing Plan

## **Appendix E**

### **Form Renewable Energy Purchase Agreement (REPA)**

*See Section 4.3 for instructions to obtain the Form REPA.*



# Appendix F

## Form Term Sheet

*See Section 4.3 for instructions to obtain the Form Term Sheet.*

## Appendix G

### Proposal Content Check Sheet

Section	Item	Completed
6.4	Executive Summary	
6.5	Appendix A (Solar Project Summary)	
	- Company Information	
	- General Project Information	
	- AEP Ohio “own or operate” requirement	
	- Bid Pricing “REPA”	
	- Bid Pricing for 50% Asset Purchase Option	
	- Equipment Manufacturer Selection	
	- Asset Purchases (Warranty documentation)	
	- Site Information	
	- Attach copies of site leases, together with site map showing land control.	
	- Describe any known environmental issues.	
	o Attach diagram of general site layout	
	o Interconnection	
	- Attach copies of all interconnection studies / completion dates	
	- Permits	
	o Ohio Power Siting Board approval plan	
	o List / Describe all permits required, status, etc.	
	- Solar Data	
	o Ohio Preferences	
	- Energy Input sheet	
	- Solar Projects Completed	
6.6	Appendix B (Bidder’s Credit Related Information)	
6.7	Appendix C (Bidder Profile)	
6.8	Appendix D (Financing Plan)	
6.9	REPA Exceptions	
6.10	Bidder Solar Project Development Experience	
6.11	Bidder Solar Project Operation and Maintenance Experience	
6.12	Additional Information for 50% Ownership Option	
	- Detailed Information About Equipment, Contractors and Warranties	
	- Detailed Draft Equity Purchase Term Sheet (Appendix F)	
6.3	Jobs Program Description	

## **CERTIFICATE OF SERVICE**

I hereby certify that a service copy of the foregoing was sent by, or on behalf of, the undersigned counsel to the following parties of record this 27<sup>th</sup> day of September, 2018, via electronic transmission.

/s/ Steven T. Nourse

Steven T. Nourse

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Summary: Testimony of Daniel R. Bradley electronically filed by Mr. Steven T Nourse on behalf of Ohio Power Company