

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

VERIFIED PETITION OF INDIANA MICHIGAN)
POWER COMPANY (I&M) FOR APPROVAL OF)
CAPACITY PURCHASE AGREEMENT (CPA))
AND ASSOCIATED ACCOUNTING AND) CAUSE NO. 46083
RATEMAKING TREATMENT, INCLUDING)
TIMELY RECOVERY OF COSTS THROUGH)
I&M'S RESOURCE ADEQUACY RIDER (RAR))
OF THE COST OF CAPACITY I&M WILL INCUR)
UNDER THE CPA.)

PETITIONER'S REVISIONS TO DIRECT TESTIMONY

Petitioner Indiana Michigan Power Company (I&M or Company), by counsel, respectfully submits the following revisions to the Direct Testimony of Justin T. Dehan, due to some items that were originally redacted that no longer need to be redacted. Several of the projects listed on pages 11 and 24 of Mr. Dehan's direct testimony are no longer classified as confidential and have been unredacted.

A clean copy reflecting the above corrections is also attached, and the updated clean versions will be offered into evidence at the hearing.

Respectfully submitted,



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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing was served this 25th day of July 2024, by email transmission, hand delivery or United States Mail, first class, postage prepaid to:

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INDIANA MICHIGAN POWER COMPANY

PRE-FILED VERIFIED DIRECT TESTIMONY

OF

JUSTIN T. DEHAN

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**DIRECT TESTIMONY OF JUSTIN T. DEHAN
ON BEHALF OF
INDIANA MICHIGAN POWER COMPANY**

I. Introduction of Witness

Q1. Please state your name and business address.

My name is Justin T. Dehan, and my business address is 1 Riverside Plaza,
Columbus, OH 43215.

Q2. By whom are you employed and in what capacity?

I am employed by American Electric Power Service Corporation (AEPSC), a
wholly-owned subsidiary of American Electric Power Company, Inc. (AEP), as a
Manager in the Regulated Infrastructure Development group. AEP is the parent
company of Indiana Michigan Power Company (I&M or Company). AEPSC
provides engineering, financing, accounting, regulatory, and similar planning and
advisory services to AEP's regulated electric operating companies, including
I&M.

**Q3. Briefly describe your educational background and professional
experience.**

I have a Bachelor of Science degree in Mathematics from The Ohio State
University and a Master of Business Administration degree from Fisher College
of Business at The Ohio State University.

During my career with AEP, I served as a data analyst in the load research
analysis group where I conducted statistical analyses of customer load profiles
in support of rate cases. I also served as a data scientist in the market risk
analytics group where I conducted quantitative risk analyses of renewable
energy purchase agreements and other commercial activity for both AEP's
regulated and unregulated operations. I joined the Regulated Infrastructure

1 Development group in 2021 where I contributed to the design, evaluation,
2 negotiation, and regulatory proceedings within I&M's 2022 RFP. I assumed my
3 current position as Manager in the Regulated Infrastructure Development group
4 in 2023.

5 **Q4. What are your responsibilities as Manager of Regulated Infrastructure**
6 **Development?**

7 As Manager, Regulated Infrastructure Development, I am part of a team that: (1)
8 structures and issues requests for proposals (RFPs) for generation resources;
9 (2) reviews and evaluates proposals received in response; (3) negotiates and
10 finalizes agreements with the successful RFP respondent(s); (4) serves as the
11 primary interface between the Company and the Independent Monitor; and (5)
12 provides ongoing commercial support as the Company pursues regulatory
13 approvals and moves forward to construction and eventual completion of
14 generation projects.

II. Purpose of testimony

15 **Q5. What is the purpose of your testimony?**

16 I support I&M's request for approval of a Capacity Purchase Agreement (CPA)
17 with Lawrenceburg Power, LLC for generation capacity from the Lawrenceburg
18 Generation Station (Lawrenceburg), which was selected through a competitive
19 all source RFP.

20 More specifically, my testimony includes the following:

- 21 • Overview of I&M's 2023 All Source RFP and selected projects.
- 22 • Review of the RFP development and issuance process and
23 engagement of Independent Monitor.
- 24 • Description of the review and scoring/ranking of proposals, bid
25 confirmation process, and selection of a shortlist.

1 **Q6. Are you sponsoring any attachments?**

2 Yes, I am sponsoring:

3 Attachment JTD-1 – 2023 All Source RFP.

4 Attachment JTD-2 – 2023 All Source RFP Summary.

5 Confidential/Highly Competitively Sensitive Attachment JTD-3C – Bid Scoring
6 Sheet.

7 **Q7. Were these attachments prepared or assembled by you or under your**
8 **direction and supervision?**

9 Yes.

III. Overview of the 2023 All Source RFP

10 **Q8. Please provide an overview of the 2023 All Source RFP.**

11 The 2023 All Source RFP targeted approximately 850 MW of solar resources,
12 800 MW of wind resources, 315 MW of storage resources with consideration for
13 60 MW of acquired storage to be paired with up to 300 MW of the acquired solar
14 resources, 540 MW of gas resources, and other supplemental capacity
15 resources to meet I&M's overall capacity need. The 2023 All Source RFP sought
16 to acquire these resources through various contract structures, including CPAs,
17 Power Purchase Agreements (PPAs), and Purchase Sale Agreements (PSAs).
18 Projects eligible to participate in the RFP included planned development
19 projects, projects to be developed at the site of I&M's retiring Rockport Plant,
20 and existing operational resources. The selected resources would be acquired
21 to meet the Company's overall capacity and energy needs identified in the
22 Preferred Portfolio from the Company's 2021 Integrated Resource Plan (IRP).
23 The IRP and the Preferred Portfolio are discussed in further detail by Company
24 witnesses Williamson and Becker. The 2023 All Source RFP targeted projects
25 with commercial operation dates to support the Company's capacity needs

beginning in PJM Interconnection LLC's (PJM) 2028/2029 Planning Year due to the retirement of the Company's Rockport Plant.

I&M designed the 2023 All Source RFP to allow for an open, non-discriminatory competitive procurement process that considered both third-party and utility ownership, a range of resource types or combinations of resource types, and various sizes and capacities within reasonable operational limits for utility needs. Projects were required to be located in either Indiana or Michigan for solar, storage, gas, or supplemental capacity resources. An expanded geographic scope, including Illinois and Ohio, was used for wind project consideration to engage a broader range of potential projects. Additionally, all planned development projects were required to either be pursuing a PJM generation interconnection agreement (GIA) or have firm transmission from MISO into PJM to be considered eligible for consideration. The 2023 All Source RFP is available in its entirety in Attachment JTD-1 and is summarized in Attachment JTD-2.

Q9. Please further describe the capacity resource that is subject in this proceeding.

The Lawrenceburg Generation Station is a natural gas combined-cycle facility owned by Lightstone Generation and located in Lawrenceburg, Indiana with interconnection to PJM in the AEP Transmission Zone. Kindle Energy LLC (Kindle) is the asset manager for Lightstone Generation. The facility was bid into the 2023 All Source RFP by Kindle under various contract structures and term lengths. Through the evaluation, scoring of proposals, and bid confirmation process that I discuss in my direct testimony, Kindle's proposal for a CPA with the Lawrenceburg facility was selected to the shortlist. The negotiation of the CPA and further due diligence of the facility are discussed by Company witness Gaul in his direct testimony.

IV. Competitive RFP Development / Issuance and Engagement of Independent Monitor

Q10. What steps did the Company take prior to the issuance of the RFP?

The Company followed a pre-RFP issuance process similar to the one utilized in development of the 2022 RFP. Prior to issuance of the 2023 All Source RFP, I&M (1) retained an Independent Monitor; (2) drafted the RFP based on the needs consistent with the Company's IRP; (3) assessed the pool of projects in the PJM interconnection process that would be eligible to bid into the 2023 All Source RFP based on information available to the Company at that time; and (4) engaged with stakeholders to gather input on the 2023 All Source RFP's structure and requirements.

Q11. Please identify and explain the role of the Independent Monitor.

I&M retained Charles River Associates (CRA) to serve as the Independent Monitor on behalf of I&M for the 2023 All Source RFP. As the Independent Monitor, CRA managed the RFP process and helped support the design and development of the RFP; led the stakeholder engagement and feedback process; conducted the Eligibility and Threshold (E&T) review for all proposals; and monitored the RFP administration from issuance to selection of a shortlist. Witness Koujak discusses CRA's role and experience as Independent Monitor in detail in his direct testimony.

Q12. How did the Company develop the structure and requirements of the 2023 All Source RFP?

The structure and requirements of the 2023 All Source RFP largely mirrored the 2022 RFP. I&M worked in cooperation with the Independent Monitor to develop the RFP based on the overall capacity need consistent with I&M's 2021 IRP submitted in January 2022. The 2023 All Source RFP, which allowed for stakeholder input in the development of the RFP prior to its issuance, was structured to be non-discriminatory and flexible with respect to technology and operating status, allow for project sizes as small as 5 MW, allow for bidders to

1 propose project configurations located at I&M's Rockport Plant site, and
2 consider both third-party structures for varying term lengths and utility ownership
3 structures for both new and existing assets.

4 **Q13. How did the Company collect and incorporate stakeholder input in the**
5 **development of the 2023 All Source RFP?**

6 The Independent Monitor facilitated a stakeholder engagement process
7 designed to provide stakeholders with an opportunity to provide input in the
8 development of the RFP. The engagement effort allowed stakeholders to review
9 the overall purpose, process, and schedule of the RFP, review RFP documents,
10 and provide input to CRA and the Company.

11 Stakeholder communications were initiated in January 2023 when I&M and the
12 Independent Monitor notified interested parties that I&M would be releasing an
13 RFP in March 2023. CRA hosted an RFP website (imallsourcerfp.com) that
14 shared information about the RFP development and issuance process, allowed
15 for download of RFP documents and presentations, and provided contact
16 information (phone/email) for sharing comments and suggestions directly with
17 CRA. Stakeholder questions and responses were published on the website to
18 ensure all participants had equal access to RFP information.

19 On February 10, 2023, CRA hosted an RFP Development Meeting during which
20 the structure of the RFP was shared and stakeholders were asked to provide
21 initial comments to support the development of the Draft RFP. The Draft RFP
22 was then released by CRA on February 17, 2023 followed by a Pre-RFP
23 Stakeholder Meeting on March 1, 2023. Input from stakeholders during and
24 following the Pre-RFP Stakeholder Meeting was received, responded to, and
25 where reasonable, incorporated into the Final RFP that was issued on March 31,
26 2023 via the CRA website.

Q14. What feedback received during the stakeholder engagement process was incorporated into the 2023 All Source RFP?

The Company received stakeholder input during the RFP Development Meeting and Pre-RFP Stakeholder Meeting, as well as through questions and comments submitted to the RFP's dedicated email address maintained by the Independent Monitor. Stakeholder feedback that was incorporated into the 2023 All Source RFP included extending eligibility to offsite projects that can be connected to the injection point at I&M's Rockport site and allowing hybrid proposals to exceed a 20% ratio of energy storage nameplate MW to solar nameplate MW, as long as the bidder of such configuration also included pricing for a configuration that complied with the 20% ratio. Ultimately, both of the eligible solar plus energy storage projects that participated in the RFP submitted multiple configurations that the Company could evaluate. Witness Koujak discusses the stakeholder engagement process and the Company's response to questions and comments in his Independent Monitor's Report and direct testimony.

Q15. Was any feedback received during the stakeholder engagement process not incorporated into the 2023 All Source RFP?

Yes. The Company received requests that, after consideration with the Independent Monitor, were not incorporated into the 2023 All Source RFP. These included requests to consider proposals for Selective Catalytic Reduction (SCR) technology at the Rockport Plant, proposals for demand-side resources, a relaxing of the interconnection study status requirement for early-stage projects without a PJM System Impact Study, and the acceptance of credit ratings from NICE (National Information & Credit Evaluation), which is a credit agency in South Korea, when determining required credit support in PSAs and PPAs. Witness Koujak discusses the stakeholder feedback that was not incorporated into the RFP, as well as the Company and Independent Monitor's reasoning for not incorporating the feedback, in his Independent Monitor's Report and in his direct testimony.

V. Proposal Review and Selection

Q16. Please describe the initial bid receipt and overall bidder response to the 2023 All Source RFP.

All bids were submitted electronically to CRA by May 26, 2023 and shared with I&M. In total, CRA (and I&M) received 90 proposals from 20 unique bidders. The responses included proposals for solar, wind, solar plus storage, transmission capacity plus wind, transmission capacity plus wind and solar, gas, standalone battery storage, and supplemental capacity resources. Several bidders submitted multiple proposals for the same project (e.g., projects were proposed with and without co-located battery energy storage systems, for multiple term lengths, and with multiple sizes), accounting for a greater number of proposals than projects. A total of approximately 15.2 GW across 90 proposals were received. Witness Koujak discusses the proposals received in his direct testimony and Independent Monitor's Report.

Q17. Please outline the general process steps in the proposal review and project selection process.

The proposal review and project selection process involved the following general steps:

Step 1: Proposal Clarification and Eligibility & Threshold (E&T) Review

Step 2: Detailed Analysis & Due Diligence

Step 3: Phase 1 Ranking: Top Ranked Proposals by Type Advance to Bid Confirmation

Step 4: Bid Confirmation: Verification of Key Terms, Bid Assumptions, and Price

Step 5: Phase 2 Ranking: Top Ranked Proposals Overall Advance to Shortlist

Step 6: Selection to Shortlist

Q18. Please describe the Proposal Clarification process (Step 1).

Upon receipt of proposals, the Company and the Independent Monitor reviewed the proposals for completeness. If information was missing or unclear in a specific proposal, bidders were given the opportunity to provide clarifying information to further evaluate the proposal through Proposal Clarification Requests (PCR). Initial PCRs were compiled within a month of proposal receipt, primarily focused on verifying key E&T requirement information, technical and contractual exceptions, and pricing assumptions. The Company and Independent Monitor also met virtually with bidders to further clarify technical details contained in the proposals and provide updates on the development status of new projects and condition of operating facilities. All questions that were asked during the virtual meetings were also delivered to bidders as written PCRs to give each bidder the opportunity to formally clarify their responses and provide additional detail. In total, the Company and Independent Monitor issued and received responses to over 950 PCRs and held 18 separate virtual meetings throughout the months of June and July of 2023.

Q19. Please describe the E&T review (Step 1).

An initial review of the proposals was conducted by the Independent Monitor to ensure all bids conformed to the E&T requirements listed in Section 9.1 of the 2023 All Source RFP (see Attachment JTD-1). The E&T requirements included high level criteria, such as meeting the RFP target commercial operation date, minimum project size, location of proposed resources, interconnection status, and minimum design life.

The E&T review was conducted in parallel with the proposal clarification process, ensuring that bidders were given reasonable opportunity to cure inconsistencies or data gaps in their respective proposals. If a proposal did not reasonably meet any one of the requirements of Sections 9.1.1 – 9.1.12 of the 2023 All Source RFP, the proposal as submitted was deemed to be ineligible for further evaluation, and the bidder was notified accordingly. Further detail on this

process is provided by witness Koujak in his direct testimony and Independent Monitor's Report.

Q20. Please provide a summary of the proposals that were removed from further consideration as a result of the E&T process.

As a result of the E&T review conducted by the Independent Monitor, a total of 39 proposals from 12 unique bidders were removed from further consideration. Reasons that proposals were determined to be ineligible included the location of the facility or project, the interconnection status of the project, the proposed COD of the project, the developer's experience and history with the proposed technology, and the technology or pricing structure failing to comply with the requirements for proposals at the Rockport Site.

Notably, of the 39 proposals that did not meet the E&T requirements, 18 were proposals for Rockport site development projects that were removed from further consideration after the Company determined that its proposed use of the existing interconnection at the Rockport site would not receive expedited study treatment within the PJM interconnection process, as the Company had initially expected when developing the 2023 All Source RFP. As a result, the projects proposing to interconnect utilizing the Company's existing capacity interconnection rights at Rockport would not be able to achieve commercial operations by December 15, 2027 as required under the 2023 All Source RFP E&T requirements. PJM's policy on the study process for the replacement of generating facilities is discussed in further detail by witness Burkholder.

Q21. Were any projects removed from further consideration that passed the E&T review?

Yes. Following the E&T review, two eligible projects were removed from consideration upon notification from the bidder that the project was being withdrawn from the 2023 All Source RFP. The first project was a wind development in Indiana that was withdrawn to pursue an agreement with a separate, non-utility off-taker that had reached advanced phases of negotiation.

1 The second project was a solar development in Indiana that was withdrawn
2 following the passing of a county moratorium that would significantly impact the
3 development timeline and configuration of the project.

4 **Q22. Were any projects kept under consideration for the shortlist that did not**
5 **initially pass the E&T review?**

6 Yes. The Meadow Lake Wind Farm IV Project (Meadow Lake Project) was
7 initially proposed by EDP Renewables North America (EDPR) without a price or
8 accompanying documentation required under the RFP. At the time proposals
9 were required to be submitted, the developer indicated that it was not able to
10 provide a proposal with a firm price due to uncertainties related to key
11 component pricing and development timeline. However, following the initial
12 shortlist, EDPR submitted a complete proposal for the Meadow Lake Project.
13 Considering the limited number of viable wind proposals that have participated
14 in I&M's 2022 RFP and 2023 All Source RFP, as well as the high demand for
15 such opportunities demonstrated by multiple wind projects withdrawing from
16 I&M's RFPs to pursue agreements with other off-takers, the Company and
17 Independent Monitor accepted the complete proposal for consideration. The
18 updated proposal that was received from EDPR underwent the same E&T
19 review process and was evaluated in each phase of the proposal review and
20 selection process in a manner consistent with all other proposals. This proposal,
21 as well as the decision to consider it within in the 2023 All Source RFP, is
22 discussed by witness Koujak in his Independent Monitor's Report and direct
23 testimony.

24 **Q23. Please describe the Detailed Analysis and Due Diligence portion of the**
25 **RFP process (Step 2).**

26 The projects that passed the E&T review underwent a detailed analysis,
27 continuing due diligence, and evaluation (scoring) process conducted by a
28 multidisciplinary team of knowledgeable industry professionals from AEP, I&M,

1 and select outside consultants.¹ Team members had specific expertise in each
2 of the non-price factor topics, as well as with economic modeling of energy and
3 capacity resources, with backgrounds in engineering, project management,
4 operations and maintenance, real estate, economic development, local
5 permitting and zoning, wind and solar resource assessment, transmission
6 planning, environmental science and permitting, energy economics and
7 modeling, and contract law.

8 During this portion of the RFP process, the multidisciplinary team issued PCRs
9 to bidders to further inform their analysis and scoring of proposals, attended the
10 virtual meetings with bidders to discuss specific details of the projects/facilities,
11 and ultimately scored the proposals using pre-defined criteria and methodology
12 that had been finalized prior to the receipt of bids. This process was similar to
13 the process used by I&M during its 2022 RFP. All scores determined by the
14 multidisciplinary team, as well as detailed scoring narratives, were reviewed by
15 the Independent Monitor for reasonableness and consistency across all
16 proposals. The detailed analysis and due diligence process allowed the
17 Company to objectively evaluate and rank each eligible bid, which informed the
18 decision to move forward in the proposal review process and conduct further
19 due diligence on the proposals.

20 **Q24. Were any improvements made to the Detailed Analysis and Due Diligence**
21 **portion of the 2023 All Source RFP relative to the 2022 RFP?**

22 Yes. One of the most significant challenges that developers of generation
23 resources face in the current environment is zoning and permitting at the local
24 level. Recognizing that this is a considerable risk to project viability, the
25 Company enhanced its analysis of local permitting risk as part of the detailed
26 due diligence phase and as a component within the non-price score. Having lost

¹ I&M relied on outside consultants for various activities including third party evaluation of the solar and wind resource information, support conducting an environmental and social justice assessment of each project, and support conducting the review of local permitting status and remaining steps for each project.

opportunities to contract with projects within the 2022 RFP, as well as projects withdrawing from the 2023 All Source RFP due to permitting challenges, the Company emphasized the importance of projects being able to demonstrate that all discretionary permits had been obtained or that the developer had identified a clear path toward obtaining such permits in the near future.

The Company engaged a third party consultant out of Fort Wayne, Indiana to conduct an analysis of the local permitting steps in each county and to inform I&M's understanding of each project's progress toward full permitting. The consultant was also an active participant in the PCR process and submitted questions to the bidders to understand the project's progress toward full permitting, evaluate potential siting risks, and score projects on their local permitting risk within the non-price factors. Given the dynamic nature of the permitting process, the consultant remained involved in the 2023 All Source RFP beyond the evaluation phase and continued to track the status of each project throughout the shortlisting and negotiation phases.

Q25. What were the components of the Economic Analysis that was conducted as part of the Detailed Analysis and Due Diligence portion of the 2023 All Source RFP process?

The Integrated Resource Planning team completed the Economic Analysis for each of the proposals that met the E&T requirements. The analysis included inputs directly from the proposals, such as the bid price, interconnection costs, and term length. It also included various inputs from the interdisciplinary team, such as transmission congestion and line loss estimates, estimated operation and maintenance costs, and other operating company specific modeling variables such as applicable federal tax credits and financing assumptions. The Economic Analysis resulted in several key price metrics that were used to determine the ultimate price score for each of the proposals:

- Levelized Adjusted Cost of Energy (LACOE);
- Levelized Adjusted Cost of Capacity (LACOC); and

- Value to Cost Ratio.

All of these metrics are based on determining the total cost of the proposals (e.g. Bid price, operations and maintenance costs, tax expenses, fuel costs, transmission interconnection costs, etc.). The Value to Cost Ratio metric is also based on the total value of the proposals which considers the proposal's expected PJM market energy and capacity revenues and any renewable energy certificate (REC) revenues. Below is a brief description of the calculation of each metric:

- The LACOE is calculated by dividing the present value of the proposal's total cost, including the cost of any transmission congestion and losses, by the present value of the proposal's expected lifetime energy output.
- The LACOC is calculated by dividing the present value of the proposal's total cost, including the cost of any transmission congestion and losses, by the present value of the proposal's accredited capacity rating.
- The Value to Cost Ratio is calculated by dividing the present value of the proposal's total value by the present value of the proposal's total cost. The Value to Cost ratio is a tool used to evaluate proposals against each other that may have differing energy and capacity characteristics, such as wind, solar, energy storage, and thermal resources.

Additional information on the Economic Analysis can be found in Section 9.2 of the RFP document (Attachment JTD-1) and in the direct testimony of witness Koujak.

Q26. Did the Independent Monitor agree that the use of the LACOE, LACOC and Value to Cost Ratio meet industry standards for the economic evaluation of proposals?

Yes. The Independent Monitor's report, sponsored by witness Koujak, includes a section that assess the final design of the RFP. In this section (2.2 of the Independent Monitor's report), witness Koujak stated that "After the proposals were screened, bids were then evaluated against economic evaluation criteria

1 and non-price evaluation criteria. For the purposes of the economic evaluation
2 criteria, I&M proposed capturing the overall cost of the proposed projects on a
3 unitized and levelized per megawatt-hour (MWh), per megawatt (MW), and
4 value to cost (revenue) basis to facilitate a cross-proposal comparison. The
5 industry standard is to adopt an impact on revenue requirements basis to
6 assess and determine the relative value to customers across the range of
7 options presented. I&M's economic evaluation in this procurement process met
8 this industry standard."

9 **Q27. What non-price factors were evaluated as part of the Detailed Analysis and**
10 **Due Diligence portion of the RFP process?**

11 A total of ten non-price factors grouped into four categories were considered in
12 the evaluation of each proposal. The four categories each accounted for up to
13 ten points of the total non-price score of each bid. The categories are described
14 below with respect to the individual non-price factors considered in each.

15 The Asset-Specific Benefits and Risks category included two factors, 1) the
16 *Contract Term/Asset Life-Related Market Risks* factor, and 2) the *Resource*
17 *Optionality and Flexibility Benefits* factor. Overall, this category evaluated the
18 project configuration and contract terms of the proposals with respect to
19 operational flexibility and performance expectations of the resource, while also
20 considering the potential for increased exposure of the Company to future
21 market volatility.

22 The Development Status and Risks category included two factors, the 1)
23 *Development Status, Interconnection Status, and Other Project Completion*
24 *Risks* factor, and the 2) *Project Timing* factor. This category assessed each
25 project with respect to its potential to meet its proposed commercial operation
26 date, its interconnection progress, local permitting progress, level of site control,

1 and any notable material supply risks. It also awarded points to those projects
2 that could be available for the 2026-2027 capacity year.

3 The Environmental, Social, and Economic Impacts/Benefits category was
4 comprised of three factors, 1) the *Carbon Emissions* factor, 2) the *Environmental*
5 *and Wildlife Impact / Permitting* factor, and 3) the *Economic Stimulus Benefits,*
6 *Community Support, Supplier/Contractor Diversity, and Environmental and*
7 *Social Justice* factor. Together these factors assessed the overall impact on
8 communities, inclusive of considerations for natural and/or historic resources,
9 environmental and social justice, and local acceptance of the project/facility.
10 This category also included consideration of potential community benefits, such
11 as the potential for increased value to (or use of) local businesses, economic
12 development, and the developer's plan to use small and diverse suppliers and
13 subcontractors, and/or contractors based in Indiana or Michigan.

14 The Proposal and Project Quality category was also comprised of three non-
15 price factors: 1) *Bidder Experience and Financial Wherewithal* factor; 2)
16 *Exceptions to AEP Generation Facility Design Standards* factor; and 3)
17 *Exceptions to Form PSA or PPA* factor. Together, these factors evaluated the
18 overall experience of the developer, their financial status, and their willingness to
19 adhere to AEP's design and contracting expectations.

20 **Q28. Please describe the Phase 1 Ranking portion of the RFP process (step 3).**

21 As previously mentioned, the 2023 All Source RFP was developed based on the
22 needs outlined in the Company's IRP, which included a Preferred Portfolio of
23 various resource types and MW targets. As outlined in section 9.4 of the 2023
24 All Source RFP included in Attachment JTD-1, the multi-step evaluation process
25 was designed to narrow the number of bids within each resource type that would
26 advance to the Bid Confirmation phase, which would include an in-depth and
27 lengthy review of the bidder's contractual exceptions and pricing assumptions.
28 The narrowing of bids in the Phase 1 Ranking step would allow the Company to
29 dedicate the most time and resources to the top-ranking projects that fit within a
30 balanced portfolio, consistent with the IRP.

1 In the Phase 1 Ranking portion of the RFP process, the multidisciplinary team
2 conducted the Economic Analysis, which accounted for 60 points (60%) of the
3 proposal's total score, and the Non-Price Analysis, which accounted for 40
4 points (40%) of the proposal's total score. The Economic Analysis focused on
5 the assessment and comparison of projects of the same generation type using
6 either a calculated LACOE for wind and solar resource or LACOC metric for
7 energy storage, gas, and supplemental capacity resources. The Non-Price
8 Analysis was based on the information gathered during the Due Diligence and
9 Detailed Analysis phase of the RFP process. Upon finalization of both the price
10 and non-price analyses for all proposals that met the E&T requirement, the price
11 and non-price scores were combined to determine an overall score (out of 100
12 points) for each proposal. Specific price and non-price scores for the proposals,
13 as well as the Phase 1 Ranking of proposals, are included in Attachment JTD-
14 3C.

15 **Q29. Were any proposals removed from further consideration following the**
16 **Phase 1 Ranking of proposals by resource type?**

17 Consistent with the evaluation of proposals in the 2022 RFP, the Company and
18 Independent Monitor had established prior to the receipt of proposals that
19 approximately 1,600 MW of wind, 1,700 MW of solar, 630 MW of energy
20 storage, 1,080 MW of gas, and 100 MW of supplemental capacity resources
21 would advance past the Phase 1 Ranking. These MW amounts represented 2x
22 the amount of MW of each resource type targeted in the 2023 All Source RFP
23 that would advance to the detailed Bid Confirmation process.

24 Ultimately, given the number of projects remaining after the E&T analysis, the
25 Independent Monitor and I&M agreed that no projects would be eliminated
26 following the Phase 1 Ranking and all eligible projects would advance to the
27 detailed Bid Confirmation process.

Q30. Please describe the Bid Confirmation portion of the RFP process (step 4).

The Bid Confirmation was an additional step in the evaluation process that was added for the 2023 All Source RFP in response to variability in the pricing assumptions and contractual exceptions among the proposals. For example, some proposals noted that the price assumed an amount and form of credit support acceptable to the Company. Alternatively, other bidders noted that their proposal did not include any credit support at all. In another example, some proposals took steps to meet the level of guaranteed availability I&M required by including spare parts in the project scope while other bidders took significant and unacceptable exceptions to the guaranteed availability provision, which would allow for a lower proposed price than a bidder who met the availability requirements.

To evaluate proposals on a level playing field with consistent pricing assumptions and to reduce the risk of future price changes during the negotiation of key contract provisions, the Company issued each bidder a Bid Confirmation letter that contained a list of contractual terms that were required to be met in order to move forward in the RFP. Bidders were given the opportunity to modify their original proposal to meet the requirements of the Bid Confirmation. To maintain the competitive pressure of the RFP while successfully obtaining the required contractual protections, all bidders were notified that their compliance with the terms and any change in price would impact their overall scoring/ranking relative to the total pool of proposals. The Company emphasized to bidders that significant price changes during the Bid Confirmation would negatively impact their potential of being shortlisted.

Although the general required provisions were consistent across all proposals (i.e. Guaranteed Availability, credit support, etc.), identification of the specific assumptions and contract exceptions that could potentially impact price during negotiations required an in-depth review of all proposals by both the legal and commercial negotiation team, as well as select groups from the multidisciplinary team. To clearly outline the expectations and further emphasize that price

1 changes would impact likelihood of reaching the shortlist, I&M and the
2 Independent Monitor conducted a second round of virtual meetings with each
3 bidder to discuss the Bid Confirmation requirements and additional analysis that
4 I&M would conduct based on responses.

5 **Q31. What requirements were included in the Bid Confirmation?**

6 As described in the Bid Confirmation letter to each bidder, the required terms
7 were those that were most likely to impact price. The Company found that during
8 the negotiation phase of the 2022 RFP, developers would often attempt to
9 increase price as a condition to their acceptance of key contract terms that the
10 developer would claim was not contemplated in the original pricing. Rather than
11 identifying these issues after projects have been shortlisted and negotiations
12 have advanced, the Company sought to identify these key issues before
13 projects could advance to the shortlist and to reevaluate the entire pool of
14 projects once all required terms had been accepted.

15 The list of requirements that applied to bids of all contract types were the
16 following:

17 Firm Pricing: Many proposals included assumptions that stated price
18 could be updated throughout the negotiation phase and even after
19 execution. In response, the Company required that all bidders offer either
20 1) a price that would remain firm at shortlisting throughout the life of the
21 contract, or 2) a specific contract price adjustment mechanism for defined
22 cost components that could be evaluated by the Company prior to
23 shortlisting. For proposals with such price adjustment mechanisms, the
24 Company conducted a contingency analysis and evaluated the proposal
25 at the price the Company estimated the proposal would ultimately reach,
26 based on market view of the identified cost component (e.g. solar module
27 pricing).

28 Credit Support: The Company's internal credit risk group conducted an
29 analysis of the financial condition of each bidder, as well as their

1 proposed parent that would offer credit support. The credit group
2 produced a set of credit requirements, including the amount, form of
3 support, and duration, that would be required for each bidder.

4 The list of requirements that applied to PSA proposals only, were the following:

5 Prevailing Wage and Apprenticeship (PWA): Bidders were required to
6 confirm they would represent that the project was compliant with PWA
7 requirements for purposes of qualifying for federal tax credits available to
8 the project. The developers would indemnify I&M against losses to tax
9 credits suffered due to PWA requirements not being met.

10 Indemnity Threshold: The contract would establish an indemnity threshold
11 of 0.1% of the contract price.

12 AEP Approved Vendors: Proposed project configurations were required
13 to be compliant with AEP's list of approved vendors for key resource
14 components (e.g. main power transformers).

15 Spare Parts: Proposals were required to include a set of spare parts for
16 identified key components that would be required under AEP's Scope of
17 Work.

18 The list of requirements that applied to PPA proposals only were the following:

19 Guaranteed Availability: Bidders were required to commit to meeting a
20 95% guaranteed availability with no exceptions beyond those included in
21 the Company's form PPA that was included in the RFP (e.g. force
22 majeure, purchaser event of default, and economic curtailment are
23 excused from availability calculation). Availability below the required 95%
24 would be cured by damage payments to the Company, also outlined in
25 the form PPA.

26 Economic Curtailment: Numerous solar proposals stated that they would
27 require I&M to reimburse the Seller for Production Tax Credits (PTC) that
28 would have been obtained and monetized if not for economic curtailment
29 of the facility caused by the Purchaser's hourly offer curve. While the

1 Company acknowledged that PTC reimbursement is reasonable for wind
2 resources with higher capacity factors that would not economically elect
3 for the Investment Tax Credit (ITC), solar projects with lower capacity
4 factors could reasonably elect the ITC, which is not negatively impacted
5 by economic curtailment. Given that solar developers have the ability to
6 mitigate exposure of tax credits to economic curtailment through election
7 of the ITC, the Company required that bidders of solar projects remove
8 any requirement for the purchaser to reimburse the Seller for PTCs lost
9 during economic curtailment.

10 **Q32. What were some of the factors that resulted in changes in price from initial**
11 **receipt of proposals in May 2023 and finalization of the Bid Confirmation**
12 **process in September 2023?**

13 Among the responses to Bid Confirmation letters, the key factors that impacted
14 final proposed pricing were 1) component costs that had changed from the time
15 of initial bid receipt to the Bid Confirmation, and 2) the cost to comply with the
16 required terms.

17 The key project component cost identified by almost all bidders was financing
18 costs that had increased as interest rates had continued to rise throughout 2023.
19 Developers of generation projects, which require large amounts of borrowed
20 capital up-front, noted that their financing costs had risen since their initial
21 proposal, which had increased the proposal price.

22 Interconnection uncertainty also increased prices. Bidders who had not yet been
23 tendered a final GIA from PJM remained subject to increased interconnection
24 costs and network upgrade costs in the event that other projects were to drop
25 out of the queue and network upgrades were reallocated to the remaining
26 projects. In lieu of providing a firm price, many bidders proposed price
27 adjustment mechanisms based on the final interconnection and network
28 upgrade costs that would be assigned to the project and identified in the GIA.

1 The key required term that invoked price increases was the requirement to
2 provide a firm price that could not change after shortlisting. Bidders took varying
3 approaches to this requirement. Some bidders priced in the risk of component
4 cost escalations, which tended to result in a more significant price increase but
5 with more price certainty for the Company. Other bidders proposed price
6 adjustment mechanisms, such as the previously mentioned interconnection cost
7 adjustment mechanism. Recognizing that the overall price increase for those
8 who proposed price adjustment mechanisms may have been smaller than those
9 who met the firm price requirement, the Company conducted its own
10 contingency analysis of the proposals. Using the proposed price adjustment
11 mechanisms and other cost exposures, such as owner's costs for PSAs, the
12 Company forecasted risk scenarios to develop a best estimate of what the price
13 would ultimately be after adjustment pursuant to the proposed mechanism.

14 Finally, one bidder's response to the Company's firm price requirement was to
15 submit additional proposals with modified terms and contract structures. In this
16 instance, [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 [REDACTED]

21 In response to I&M's requirement that this mechanism be removed from the
22 proposal, the bidder elected to provide additional proposals for both a capacity
23 and energy PPA and a capacity-only agreement with shorter terms that would
24 expire prior to any impact from the new emissions regulations on the facility. As
25 previously described, the price changes were all evaluated as part of the
26 competitive scoring and ranking of all proposals, using both price and non-price
27 factors.

28 **Q33. Please describe the Phase 2 Ranking portion of the RFP process (step 5).**

29 Consistent with Phase 1 Ranking, in the Phase 2 Ranking portion of the RFP
30 process, the price score accounted for 60 points (60%) of the proposal's total

1 score, and the Non-Price Analysis accounted for 40 points (40%) of the
2 proposal's total score. In the Phase 2 Ranking, the economic modeling team
3 updated the Economic Analysis using the prices received in the Bid
4 Confirmation process and incorporated the results of the contingency analysis.
5 In this phase of analysis, which assessed and compared projects across all
6 technology types, the Economic Analysis was based on the Value to Cost ratio.
7 The Value to Cost ratio allowed for the holistic consideration of all value streams
8 provided by each generation type. The Non-Price Analysis was also updated
9 based on responses to the bid confirmation. For example, non-price category
10 10, *Exceptions to Form PSA or PPA* considers contract deviations. Having cured
11 some of the key exceptions during the Bid Confirmation process, many
12 proposals received an increase in their score for this non-price factor. Upon
13 finalization of both the price and non-price analyses for all proposals that met
14 the E&T and Bid Confirmation requirements, the price and non-price scores
15 were combined to determine an overall score (out of 100 points) for each
16 proposal. Specific price and non-price scores for the proposals, as well as the
17 Phase 2 Ranking of proposals, are included in Confidential/Highly Competitively
18 Sensitive Attachment JTD-3C.

19 **Q34. Please provide a summary of the Phase 2 scores for all the eligible**
20 **proposals.**

21 Once the economic and non-price evaluations were completed and reviewed by
22 the Independent Monitor for consistency and completeness, the scores were
23 combined to yield a total score for each bid. Total scores for all eligible bids
24 ranged from approximately 63.9 to 91.9 out of 100. A full report of the price and
25 non-price scores for each of the eligible bids is provided in the Bid Score Sheet,
26 Confidential/Highly Competitively Sensitive Attachment JTD-3C. Further
27 discussion on the selection process and rationale are provided by Witness
28 Koujak.

1 **Q35. What projects were selected to advance to the initial shortlist (step 6)?**

2 A total of nine proposals were initially selected to the shortlist to initiate contract
3 negotiations. As previously mentioned, EDPR's proposal for the Meadow Lake
4 Project was added to the shortlist later in the process, bringing the total to ten
5 proposals shortlisted in the 2023 All Source RFP. The large number of
6 proposals selected to the shortlist was the result of lessons learned in the 2022
7 RFP. As previously described in my responses related to the Bid Confirmation
8 process, [REDACTED]

9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]

16 Ultimately, three of the ten proposals were successfully negotiated, which
17 includes the Lawrenceburg CPA, associated with an existing gas facility, that is
18 subject in this proceeding, as well as the wind PPA and solar PPA that are
19 subject in another proceeding. Company witness Gaul describes the due
20 diligence process, risk analysis and other aspects of the CPA.

21 **Q36. Does this conclude your pre-filed verified direct testimony?**

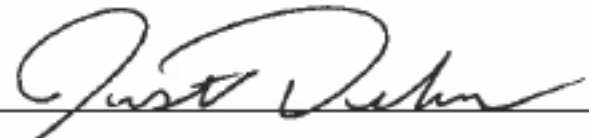
22 Yes, it does.

VERIFICATION

I, Justin T. Dehan, Manager – Regulated Infrastructure Development at American Electric Power Service Corporation, affirm under penalties of perjury that the foregoing representations are true and correct to the best of my knowledge, information, and belief.

July 25, 2024

Date: _____


Justin T. Dehan



**American Electric Power Service Corporation
as agent for
Indiana Michigan Power Company**

Request for Proposals

Approximately 800 MWac of nameplate rated
Wind Energy Resources,
(with Optional Energy Storage Systems)

Approximately 850 MWac of nameplate rated
Solar Energy Resources,
*(with Consideration for 300 MWac of Solar Energy Resources to be paired with
up to 60 MWac of Energy Storage Systems)*

Approximately 315 MWac of nameplate rated
Energy Storage Resources,
*(with Consideration for 60 MWac to be paired with up to 300 MWac of Solar
Energy Resources)*

Approximately 540 MWac of nameplate rated
Gas Generation Resources,
(with Opportunity to Utilize Existing Rockport Site)

**Supplemental Capacity to Meet Overall Capacity Need
from
Emerging Technologies, Thermal, and Other Capacity
Resources**

The Resources requested via this RFP will be acquired via Purchase and Sale Agreements (PSA) for purchase of 100% of the equity interest of the Project's limited liability company (Project LLC) on or about final completion for gas,



*wind, solar, and Non-ITC qualifying projects, and at Mechanical Completion
for energy storage projects*

OR

*PSA for 100% of the equity interest of operational Projects inclusive of gas,
wind, solar and energy storage technologies*

OR

*Power Purchase Agreements (PPA) for purchase of the Renewable Energy
Products produced by a Solar and/or Wind Energy Resource, and Energy,
Capacity, and Ancillary Services from Gas Generation Resources and Energy
Storage Resources, and Supplemental Capacity Products produced by
Supplemental Capacity Resources.*

RFP Issued: March 31, 2023

Proposals Due: May 26, 2023

Web Address: <https://www.IMAllSourceRFP.com>



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BACKGROUND

I&M is pursuing additional generation and capacity resources consistent with its 2021 IRP via an all-source request for proposals (RFP) as follows:

- Approximately 800 MWac Wind via a purchase and sale agreement (PSA) for purchase of 100% equity interest in a project company or a power purchase agreement (PPA) for purchase of Renewable Energy Products produced by a Wind resource
- Approximately 850 MWac Solar via a purchase and sale agreement (PSA) for purchase of 100% equity interest in a project company or a power purchase agreement (PPA) for purchase of Renewable Energy Products produced by a Solar resource, with consideration for 300 MWac of Solar paired with up to 60 MWac of Storage
- Approximately 315 MWac Storage via a purchase and sale agreement (PSA) for purchase of 100% equity interest in a project company or a power purchase agreement (PPA) for purchase of Energy Products produced by a Storage resource, with consideration for 60 MWac of Storage paired with up to 300 MWac of Solar
- Approximately 540 MWac Gas Generation Resources via a purchase and sale agreement (PSA) for purchase of 100% equity interest in a project company or a power purchase agreement (PPA) for purchase of Energy Products produced by a Gas resource
- Supplemental Capacity Resources to meet overall capacity need via a purchase and sale agreement (PSA) for purchase of 100% equity interest in a project company or a power purchase agreement (PPA) for purchase of Supplemental Capacity Products produced by a Supplemental Capacity Resource

Proposals for existing projects are eligible to be submitted into the RFP under either the PPA or PSA contract structures.

A portion of the retiring Rockport Plant site will be available for bidders to propose Combustion Turbine (CT) generation projects as well as Storage projects for participation in the RFP.

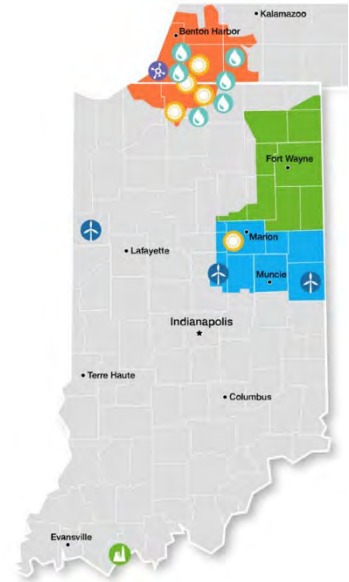


1. Introduction

American Electric Power Service Corporation (AEPSC) and Indiana Michigan Power Company (I&M, Company or Indiana Michigan Power) are subsidiaries of American Electric Power Company, Inc. (AEP).

AEPSC is administering this Request for Proposals (RFP) on behalf of I&M. Affiliates of AEP and I&M (Affiliate) are not permitted to participate in this RFP.

American Electric Power is one of the largest electric utilities in the United States, delivering electricity and custom energy solutions to approximately 5.6 million customers in 11 states. AEP owns the nation's largest electricity transmission system, a more than 40,000-mile network that includes more 765-kilovolt extra-high voltage transmission lines than all other U.S. transmission systems combined. AEP also operates 225,000 miles of distribution lines. AEP ranks among the nation's largest generators of electricity, owning approximately 25,000 megawatts of generating capacity in the U.S. AEP also supplies over 5,300 megawatts of renewable energy to customers. 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. More information about AEP can be accessed by visiting www.aep.com.



Indiana Michigan Power Company, headquartered in Fort Wayne, IN, encompasses the AEP service territories in Indiana and Michigan. I&M serves approximately 476,000 Indiana customers and 131,000 Michigan customers. Currently I&M has approximately 4,200 MW of generating capacity (ICAP).

I&M's current generation portfolio mix includes the following:

BASE LOAD – 3,685 MW. Resources include the coal-fired Rockport Plant located in Rockport, IN; the Cook Nuclear Plant located in Bridgman, MI; and I&M's purchase under the Intercompany Power Agreement with the Ohio Valley Electric Corporation.

HYDRO CAPACITY - 22.4 MW. I&M owns six hydro plants across Indiana and Michigan. (See Table 1).

WIND RESOURCES - 450 MW. I&M has 450 MW of long-term renewable energy purchase agreements (REPA) with wind generation resources located in the state of Indiana (See Table 2).

UNIVERSAL-SCALE SOLAR – 34.7 MW. I&M's Clean Energy Solar Pilot Project (CESPP) consists of four separate solar facilities totaling 14.7 MWs. All four solar facilities achieved commercial operation by the end of 2016 and currently operating as



designed. Additionally, St. Joseph Solar Farm, a 20 MW solar facility in the South Bend area, achieved commercial operation in 2021.

Table 1 (Hydro Plants)		
Facility Name	Name-Plate	Location – State (County)
Elkhart	3.4 MW	IN (Elkhart)
Twin Branch	4.8 MW	IN (St. Joseph)
Constantine	1.2 MW	MI (St. Joseph)
Mottville	1.7 MW	MI (St. Joseph)
Buchanan	4.1 MW	MI (Berrien)
Berrien Springs	7.2 MW	MI (Berrien)
Total	22.4 MW	

Table 2 (Wind REPAs)		
Facility Name	Name-Plate	Location – State (County)
Fowler Ridge I	100 MW	IN (Benton, Tippecanoe)
Fowler Ridge II	50 MW	IN (Benton, Tippecanoe)
Wildcat	100 MW	IN (Madison, Tipton)
Headwaters	200 MW	IN (Randolph)
Total	450 MW	

Table 3 (Solar Assets Owned)		
Facility Name	Name-Plate	Location – State (County)
Deer Creek	2.5 MW	IN (Grant)
Twin Branch	2.6 MW	IN (St. Joseph)
Olive	5.0 MW	IN (St. Joseph)
Watervliet	4.6 MW	MI (Berrien)
St. Joseph	20.0 MW	IN (St. Joseph)
	34.7 MW	

In addition to its generation portfolio, I&M has approximately 5,300 miles of transmission and 20,600 miles of distribution lines. Additional information regarding I&M can be accessed by visiting www.indianamichiganpower.com.

2. RFP Overview

- 2.1 I&M is pursuing additional solar, wind, gas, and storage generation resources as identified in its 2021 IRP submitted in January 2022 in Indiana and filed in February 2022 in Michigan. Though the IRP has identified specific MWac buildouts of various resources, the Company may pursue more of any resource type as a result of its RFP process, as detailed in Section 9.4.



- 2.2 I&M is requesting Proposals which will result in obtaining approximately: 800 MWac of nameplate rated Wind Energy Resources, 850 MWac of nameplate rated Solar Resources (with consideration for 300 MWac of Solar paired with 60 MWac of Storage), 540 MWac of Gas Generation Resources, 315 MWac of Energy Storage Resources (with consideration for 60 MWac of Storage paired with 300 MWac of Solar), and Supplemental Capacity Resources to meet overall capacity need. The Projects sought through this RFP are to satisfy the requirements identified in the 2021 IRP. Depending on the results of the RFP, the Company may pursue different quantities or types of resources from those specified above. The minimum nameplate rated bid size for this RFP is 5 MWac.
- 2.3 Supplemental Capacity Resources include Emerging Technologies, Thermal, and Other Capacity Resources.
- 2.4 As an alternate Proposal for a standalone Solar or Wind energy resource, Bidders may include a Proposal for a Solar or Wind energy resource with a co-located energy storage system (Storage Option). For such proposals, the amount of Storage proposed should not exceed 20% of the nameplate capacity of the generation resource. Standalone Energy Storage Resource proposals are also sought in this RFP.
- 2.5 The Resources requested via this RFP will be acquired via Purchase and Sale Agreements (PSA) for purchase of 100% of the equity interest of the Project's limited liability company (Project LLC) at Mechanical Completion for energy storage projects, and on or about Final Completion for gas, wind, and/or solar projects, or, Power Purchase Agreements (PPA) for purchase of the Renewable Energy Products produced by a Solar and/or Wind Energy Resource, and Energy Products from Gas Generation Resources and Energy Storage Resources, and Supplemental Capacity Products produced by a Supplemental Capacity Resource. I&M will not consider proposals in this RFP that do not meet these criteria. Proposals for operational projects are eligible to be submitted into the RFP under either the PPA or PSA contract structures.
- 2.6 For PSA Proposals, while qualifying for Federal Tax Credits is not an Eligibility and Threshold Requirement (Section 9.1) for participating in the RFP, the value brought to the Proposals in buying down the cost of energy by utilization of these tax credits is significant, and is included in the Company's Economic Analysis (Section 9.2) and



ranking of each of the respective Proposals. Any projects that may not qualify for such credits for any reason must be disclosed by the bidder in the submission.

- 2.7 Affiliates of AEP and I&M (Affiliate) are not permitted to participate in this RFP.
- 2.8 I&M may execute one or more Solar, Wind, Gas, Storage or Supplemental Capacity Resource Project PSAs or PPAs as a result of this RFP.
- 2.9 Any Project(s) which I&M selects as a result of this RFP will be subject to I&M's receipt of the necessary regulatory approvals, including regulatory approvals from the Indiana Utility Regulatory Commission and the Michigan Public Service Commission.
- 2.10 I&M has engaged Charles River Associates (CRA) to serve as an Independent Monitor for the RFP. Overall, CRA will serve in a lead role with respect to the stakeholder engagement processes associated with the RFP, ensuring that stakeholder input is incorporated into the competitive procurement process, screening RFP responses, and monitoring AEP/I&M's efforts associated with the development, issuance, and evaluation of the bids (pursuant to all jurisdictional requirements set forth by the Indiana Utility Regulatory Commission "IURC" and the Michigan Public Service Commission "MPSC").
- 2.11 All questions regarding this RFP should be emailed to IMAllSourceRFP@CRAI.com
- 2.12 CRA will post a list of the non-confidential "Questions and Answers" at its website on a weekly basis following the issuance of the RFP until the Proposal Due Date.
- 2.13 This RFP is not a commitment by the Company to acquire any Project or purchase Renewable Energy Products, Energy Products, or Supplemental Capacity Products from any Project, and it does not bind or obligate the Company or its Affiliates in any way. The Company in its sole discretion will determine which Bidders, if any, it wishes to engage in negotiations with that may lead to definitive PSA or PPA agreements with one or more selected Projects.
- 2.14 RFP bid results and an analysis of RFP bid results will be provided after the RFP process has concluded by AEP to Interested Stakeholders that (i) have executed non-disclosure agreements (NDA) and (ii) are not competitive entities (*i.e.*, potential bidders and their consultants and affiliates). Bid results and any analysis of bid results will be provided in a manner that does not disclose the identity of the bidder unless prior written consent is obtained by AEP to disclose the identity of the bidder. AEP may disclose this information without liability hereunder.
- 2.15 The RFP seeks proposals for both new and operational projects. Any proposals submitted for operational, non-Supplemental Capacity projects must demonstrate that the underlying asset has a minimum of 10 years of operational life remaining based on initial design standards to participate in the RFP. Bids for Supplemental Capacity must



demonstrate that the remaining operational life of the project is at least as long as the term of the bid proposed. Additionally, bidders for operational projects must have 100% ownership of the asset or have documented authority to offer the asset into the RFP.

- 2.16 A portion of the retiring Rockport Plant site will be available for bidders to propose Combustion Turbine (CT) generation projects as well as Energy Storage projects for participation in the RFP; no other technologies will be considered at this time for the Rockport site. I&M will offer the Rockport injection point to offsite projects of any generation type, however, such proposals will need to demonstrate site control that does not introduce an unacceptable level of risk and uncertainty with respect to execution, schedule, and cost. Additionally, such projects must demonstrate compliance with all aspects of the RFP. Bids on the Rockport site or proposing to use the Rockport injection point will be limited to PSAs only; PPAs will not be considered. For interested bidders, a pre-bid Rockport site visit will be available on April 4, 2023 to review the site, discuss the proposed layout and bids specifications, and answer any questions. The I&M Rockport Plant is located at 2791 North U.S. Highway 231, Rockport, IN 47635. See Appendices R and S for site specific information. No entry to the site will be provided without prior execution of the NDA and authorization by I&M.
- 2.17 CTs are the only thermal resource available to be proposed on the Rockport site. Proposals for non-Rockport thermal projects do not face this limitation and can bid CTs or other thermal resources (not including coal or CCGT technologies).
- 2.18 Rockport specific CT specifications will be provided Appendix R), as well as a general CT specification (Appendix F) for new facilities outside the Rockport facility. Operational thermal resources built to specifications other than those provided within this RFP will be considered and reviewed by a case-by-case basis, including but not limited to a review of the air permit and associated jurisdiction/rules/requirements for both performance and environmental standards set forth. Within the air permit requirements, I&M will further evaluate applicability for long term use, or otherwise determine if a retrofit would be necessary.

3. Product Description and Requirements

- 3.1 PSA Projects: For PSA Proposals, each Project is required to be capable of generating and delivering energy into 1) PJM (PJM Interconnection L.L.C), 2) MISO (Midcontinent Independent System Operator) with firm deliverability rights into PJM, or 3) I&M's Distribution System by the Expected Commercial Operation Date.
- 3.2 PPA Products: For PPA Proposals, the Company is seeking to purchase Renewable Energy Products, Energy Products, and Supplemental Capacity Products for delivery into 1) PJM, 2) MISO with firm deliverability rights into PJM, or 3) I&M's



distribution electrical system via a PPA with a contract start date by the Expected Commercial Operation Date. For all PPAs including Capacity, respondents must acknowledge and accept all responsibilities for PJM capacity performance requirements and penalties. For guidance on individual Resources refer to Section 5.

3.2.1 Renewable Energy Products:

3.2.1.1 Energy

3.2.1.2 Capacity

3.2.1.3 Ancillary Services (if available)

3.2.1.4 Environmental Attributes

3.2.2 Energy Products shall include:

3.2.2.1 Energy

3.2.2.2 Capacity

3.2.2.3 Ancillary Services (if available)

3.2.3 Supplemental Capacity Products shall include:

3.2.3.1 Energy (if available)

3.2.3.2 Capacity

3.2.3.3 Ancillary Services (if available)

3.2.3.4 Environmental Attributes (if available)

- 3.3 **Expected Commercial Operation Date (COD):** The Company is pursuing Projects that can achieve an Expected Commercial Operation Date (COD) by 12/15/2027 to meet I&M's capacity obligation for PJM capacity planning year 2028-2029. Earlier CODs for Supplemental Capacity Resources with contracts longer than 3 years will also be considered to meet obligations for PJM capacity planning year beginning 2027-2028 or 2028-2029 as the first year of contracted capacity. Supplemental Capacity Resources will be eligible for locations specified in Section 3.6 of the RFP. However, Bidders may propose single-year capacity contracts for 2027-2028 or 2028-2029 within the RTO LDA (Locational Deliverability Area) of PJM.
- 3.4 **Target Size:** The I&M RFP is seeking approximately: 800 MWac of nameplate rated Wind Energy Resources, 850 MWac of nameplate rated Solar Resources (with consideration for 300 MWac of Solar paired with 60 MWac of Storage), 540 MWac of Gas Generation Resources, 315 MWac of Energy Storage Resources (with consideration for 60 MWac of Storage paired with 300 MWac of Solar), and



Supplemental Capacity Resources to meet overall capacity need. The ultimate amount of any one type of resource selected will depend on AEP's bid selection process.

3.5 Minimum Acceptable Project Size: 5 MWac.

3.6 Location: Solar, Gas, Energy Storage, and Supplemental Capacity Resource Projects must be located in the states of Indiana or Michigan. Wind Projects must be located in the states of Indiana, Michigan, Illinois, or Ohio. All Projects must interconnect to: 1) PJM, 2) MISO with firm deliverability rights into PJM, or 3) I&M's Distribution System. I&M has a preference for Projects that provide economic benefit to the states of Indiana or Michigan.

3.7 Local Content: I&M encourages the use of local goods or services sourced, in whole or in part, from one or more Indiana or Michigan businesses where feasible. The bidder should identify these resources in their proposal.

3.8 Project Development:

3.8.1 In addition to AEP Generation Facility Standards (See Sections 6.4 and 6.5 for instructions to obtain) each Project must satisfy the following as applicable:

- o Wind Project turbines must be manufactured by GE, Vestas, or Siemens-Gamesa (see Appendix F) and must include the cold weather package.
- o Solar panels and inverters must be manufactured by those approved vendors in the AEP Generation Facility Standard (see Appendix F).
- o Energy Storage Projects must satisfy the AEP Battery Energy Storage System Technical Specification and Design Criteria (Appendix F). For Rockport-specific energy storage criteria, see Appendix S.
- o Gas Generation Resources must satisfy the AEP Gas Generation System Technical Specification and Design Criteria (Appendix F). Additionally, Thermal proposals shall include space allocation for future hydrogen and/or carbon capture in their design, although no associated scope or pricing is required. If the Thermal resource has dual-fuel capability, bidders are required to provide optional pricing, space allocation, and scope for a fully operational dual-fuel facility.
- o Combustion turbine (CT) Projects proposed for the Rockport site must also satisfy the following requirements:
 - o The technology will be limited to GE, Siemens, or Mitsubishi
 - o Total net output up to ~540 MW



- o Two (2) “F” or “G” class CTGs. Designs with SCR’s will not be considered at this time
- o Utilized in simple cycle configuration for once daily cyclic duty, fast start and ramp rates, and low minimum emission compliance (MECL) load rating
- o The CTGs will be operated as peaker units with about 20% base load capacity factor on an annual basis
- o The combustion turbine shall be designed for operation on 100% natural gas with dry low NOx (DLN) combustors
- o Maximum NOx emission shall be 9 ppmvd @ 15% O2. SCR’s will not be considered
- o Bidders required to configure plant design to allow for future potential conversions to (1) hydrogen as a fuel source; or (2) combined cycle with carbon capture capabilities. The costs associated with implementation of a hydrogen conversion or carbon capture retrofit is not required at this time
- o For a full list of “optional”, and “required optional” scope and pricing requests of features for Rockport CT’s, please see Appendix R (Rockport New Generation Project EPC Specification document 418162-43407-00-EM-SPC-00001-RB.. To summarize the options requested vs. required, please see the following table:

Feature	Rockport Spec
Hydrogen Firing	Not required
Fast Start < or = to 10 minutes	Required with base bid
Dry Low NOx (DLN) Combustors	Required with base bid
Electro-Mechanical Valve Actuations	Required with base bid
Start-up and commissioning spares and special tools	Required with base bid
Black Start Capability	Optional Pricing Required
Liquid Fuel Firing (see Note 1 below)	Optional Pricing Required
Remote Start Capability	Optional Pricing Requested
Compliance with AEP Documentation Requirements (Table 10)	Optional Pricing Requested
HEPA Filtration	Optional Pricing Requested
Alarm Help documentation capability	Optional Pricing Requested



Continuous Auto Tuning	Optional Pricing Requested
Operational Spare Parts	Optional Pricing Requested
Gas Chromatograph	Optional Pricing Requested
Power Augmentation with Evap Cooling or Wet Compressor	Required with base bid
NOx Limit	9 ppmvd
SCR	Not required
Natural Gas Firing	100%
Machine Class	Determined By Bidder
Net Capacity based on 2 Advanced Machines	Up to 540 MW

Note 1: For scope associated with Liquid Fuel Firing “Required Optional Pricing” see Appendix F Generic CT Specifications document 418008-00355-00-ME-SPC-15220 section 1.2.1.

Note 2: Regarding the table above, for new CT’s outside the Rockport Facility, see Appendix F Generic CT Specifications document 418008-00355-00-ME-SPC-15220 section 1.2.1 for a similar (but different) list of optional and required optional scope and pricing.

- o In consideration of potential future carbon capture, Bidders are required to allow spacing and design consideration for future (potential) combined cycle technology if proposing CTs (applicable to new builds). The conceptual and preliminary layout for combined cycle spacing (using Rockport specific considerations) is illustrated in a conceptual layout in Appendix R-A.
- o For non-wind/solar/energy storage/gas generation, the asset will be, or have been, built using utility grade equipment, components and materials. The asset design must incorporate prudent utility features for maintainability and safe reliable operation.
- o I&M has a preference for proposals offering black start capabilities. Bidders should state whether a facility has black start capability. If a facility does not have black start capability installed but could be made black start capable, Proposals are required to provide the additional pricing needed for black start capability (as an option in addition to the base proposal) as well as an estimated construction timeline and estimated cost to operate.



- 3.8.2 Wind Projects: Each Wind Project must have a robust wind resource analysis/study prepared by an independent consultant which shows the expected energy output from the Project utilizing the turbines that will be used for the Project. Such analysis should include P50, P75, P90, P95 and P99 output with 1-year, 5-year, 10-year, 20-year and 30-year estimates. Bidders are required to provide site information, including raw meteorological data to the Company for use by the Company's independent consultant (Appendix H).
- 3.8.3 Solar Project: Bidders are required to submit all Solar Resource Information (Appendix I).
- 3.8.4 Energy Storage Projects: Bidders proposing battery energy storage systems (BESS) are required to submit all Energy Storage Resource Information (Appendix J). Storage technologies that do not fall within this category would be considered Emerging Technology Projects under the Supplemental Capacity category of the RFP.
- 3.8.5 Thermal Projects: Bidders are required to submit all Thermal Resource Information (Appendix K).
- 3.8.6 Emerging Technology Projects: Bidders are required to submit all Emerging Technology Resource Information (Appendix L). Emerging Technology must have demonstrated feasibility, be commercialized, and qualify as a Capacity Resource under the PJM Tariff.
- 3.8.7 Thermal Projects Gas Supply/Infrastructure Considerations: For bids submitted under the PPA contract structure, Bidders are responsible for securing gas supply. For bids submitted under the PSA contract structure, AEP will be responsible for securing the gas transportation infrastructure and any associated long-term transportation agreement for new gas facilities proposed, including the Rockport CT facility.
- 3.8.8 For the Rockport CT facility, AEP is responsible for scope associated with gas transportation infrastructure and tie-in scope up stream and including Tie Point 1 (TP-1) physical tie illustrated conceptually within Appendix R-A. The Developer gas infrastructure scope will include installation of gas station and all infrastructure required downstream of TP-1 (illustrated



conceptually within Appendix R-A. The physical tie-in scope for TP-1 will be performed by the gas transport company contracted by AEP.

- 3.8.9 For operational gas facility proposals, AEP will require review of previously established gas transportation and gas supply contract(s) terms, including applicable hub pricing.
- 3.8.10 New Wind, Solar, and Gas Projects must have a minimum design life of 30 years and Energy Storage Projects must have a minimum design life of 20 years. The design life for Supplemental Capacity Resources is technology dependent with a preference for 30 years and a minimum of 15 years.
- 3.8.11 Wind or Solar with Storage Option: Bidders may include in their Wind or Solar proposals, as an option, a Bid Price for a Wind or Solar Resource with a co-located energy storage system. The base proposal must be for 4-hours of storage with a nameplate capacity that is at least 20% of the nameplate capacity of the Wind or Solar with which it is paired. I&M will also consider Wind or Solar proposals paired with storage where the storage nameplate capacity percentages are greater than 20% of the Wind or Solar nameplate rating and I&M will also consider storage durations of 6 hours or longer. Storage co-located with Wind or Solar is required to be capable of charging both from the grid as well as by the Wind or Solar with which it is paired.
- 3.8.12 For Bidders proposing Standalone Storage, the base proposal must include options for both a 4-hour and 6-hour storage duration. I&M recognizes that 4-hour duration is a common standard, but also has a strong interest in 6-hour storage duration responses. I&M will also consider proposals with durations of 8 hours or longer.
- 3.8.13 Bidders must have established site control of the proposed Project. Site control must be in the form of direct ownership, land lease, land lease option, purchase option, and/or easement. A letter of intent will not be an acceptable form of demonstrated site control.
- 3.8.14 Proposals for non-thermal bids must comply with Prevailing Wage and Apprenticeship Requirements (PWAR) providing full value Federal Tax Credits (e.g., PTCs and ITCs) under the Inflation Reduction Act. Bidders should explain in detail any additional Federal Tax Credits available to proposed Projects associated with energy community or domestic content qualification (Bonus Credits).
- 3.8.15 Bidders shall use reasonable efforts to utilize and adopt a subcontracting plan to use small and diverse suppliers as subcontractors for work.
- 3.8.16 AEP has a commitment to consider the environmental and social impacts of our recommendations and decisions as we serve our communities, especially



low-wealth communities, communities of color and other historically marginalized communities. As part of our focus on delivering safe, clean, reliable and affordable electricity, we seek partners that are dedicated to meaningful engagement with our customers and communities to ensure fair treatment and equitable decision making.

3.8.17 I&M will look for Bidders to identify ESJ benefits associated with their project for planned facilities and operations for operational facilities.

3.9 Interconnection:

3.9.1 Project must be interconnected to:

- 1) PJM, or
- 2) MISO with Bidder being responsible for securing Firm Transmission from the project in MISO to PJM, or
- 3) I&M's distribution electrical system.

3.9.2 Except for Rockport re-use, Projects in PJM must have a completed PJM System Impact Study and an active queue position in the PJM generator interconnection study process of AG1 or earlier.

3.9.3 Projects interconnecting to MISO must have completed Phase 3 of MISO's Definitive Planning Phase and have the Final DPP SIS and Network Upgrade Facilities Study and have secured Firm Transmission into PJM.

3.9.4 Projects interconnecting to I&M's distribution electrical system must have a completed Distribution Impact Study from the I&M Distribution Planning Group.

3.9.5 Bidders are required to provide the current status of the Project's interconnection queue position in submitted bid materials. I&M requires further updates on the status of the Project's interconnection queue position if new information arises during the RFP process that may impact the delivery



timeline or costs of the project (through either direct coordination with the RTO or as a result of new regulation, guidance, or policy changes).

- 3.9.6 The interconnection point with the PJM transmission system or I&M's distribution electrical system will be the Point of Delivery.
- 3.9.7 Bidders are responsible for following the established policies and procedures that are in effect regarding facility interconnection and operation with the interconnecting utility, PJM, or MISO, as applicable.
- 3.9.8 The Bidder is responsible for all costs associated with transmission interconnections and system upgrades, including affected system upgrades (if any), as required by the interconnecting utility, PJM, or MISO as applicable. Bidders of Projects located in MISO are also responsible for any costs associated with obtaining Firm Transmission to PJM.
- 3.9.9 Bidders seeking to propose a technology that is not currently reflected in their interconnection agreement or interconnection study documentation must clearly describe the timing and process (including reference to the applicable RTO tariff and/or manual) needed to make such a change in fuel type.

4. PSA Bid Price and Structure

- 4.1 Proposal pricing must be for the Company's acquisition of a turnkey Project that is a complete, commercially operable, and integrated electric generating plant:
 - 4.1.1 Wind Projects must be designed for a minimum 30-year life. Pricing for Wind Projects must include, but not be limited to, approved wind turbine generators with 30-year life certification (as sited) from manufacturer, balance of plant equipment, operations and maintenance (O&M) facilities, project substation, generation tie-line, SCADA, IT, and all facilities required to deliver energy into PJM or MISO. In addition, pricing must include costs associated with ALTA/title insurance and construction financing. Operational wind projects are not required to possess the cold weather package for turbines.
 - 4.1.2 Solar Projects must be designed for a minimum 30-year life. Pricing for Solar Projects must include, but not be limited to, solar modules, inverters, racking, tracking system, balance of plant equipment, O&M facilities (if applicable), project substation, generation-tie line, SCADA, IT, and all facilities required



to deliver energy into PJM or MISO. In addition, pricing must include costs associated with ALTA/title insurance and construction financing.

- 4.1.3 Gas Projects must be designed for a minimum 30-year life. Pricing for Gas Projects must include, but not be limited to, combustion turbine equipment, O&M facilities, project substation, generation-tie line, SCADA, IT, and all facilities required to deliver energy into PJM or MISO. In addition, pricing must include costs associated with ALTA/title insurance and construction financing. I&M prefers that any new CTs are capable of burning a gas/hydrogen blend, preferably up to 30% hydrogen. I&M would appreciate it if bidders could provide information about the potential to convert to 100% hydrogen sometime after 2035. This request is not applicable to proposals for operational gas projects.
 - 4.1.4 Energy Storage Projects must be designed for a minimum 20-year life. Pricing for Energy Storage Projects must include, but not be limited to, storage containers, O&M facilities (if applicable), project substation, generation-tie line, SCADA, IT, and all facilities required to deliver energy into PJM or MISO. In addition, pricing must include costs associated with ALTA/title insurance and construction financing.
 - 4.1.5 Supplemental Capacity Resources will have a design life that is technology dependent with a preference for 30 years and a minimum of 15 years. Pricing for Supplemental Capacity Projects must include, but not be limited to, balance of plant equipment, project substation, generation-tie line, O&M facilities, SCADA, IT, all facilities required to deliver energy to the point of interconnection. In addition, pricing must include costs associated with ALTA/title insurance and construction financing.
 - 4.1.6 Operational Gas, Wind, Solar, and Energy Storage Resources are eligible to be submitted into the RFP. Such resources must have a minimum of 10 years of remaining operational life based on initial design standards to participate in the RFP.
- 4.2 In addition to Section 4.1, Proposal pricing must include the costs associated with the following:
- 4.2.1 A minimum of two-year comprehensive warranty from a creditworthy entity for all equipment, including design, labor and materials, and fitness for purpose.
 - 4.2.2 Post-commercial operation testing activities and associated costs, including the installation and removal of any temporary test meteorological stations (wind only).



- 4.2.3 Transmission and interconnection facilities required for the Project, including a detailed list of system or network upgrades, as required by PJM or MISO, including any affected system upgrades. Bidders of Projects located in MISO are also responsible for any costs associated with obtaining Firm Transmission to PJM.
- 4.2.4 Pricing shall include all costs associated with the development, design, engineering, procurement, construction, commissioning and applicable testing and start-up of the facility.
- 4.2.5 Pricing must include transfer of all property rights and/or any land lease(s) / easements. The O&M facility and project substation must be hosted on land that is owned and not leased.
- 4.3 The proposal must not be contingent upon awarding an operations and maintenance agreement for the Project and Proposal Bid Price shall not be contingent upon an operations and maintenance agreement for the Project.
- 4.4 Energy Storage Projects and non-Solar, non-Wind or Other ITC Qualifying Projects: The PSA will be for the purchase of 100% of the equity interest of the Project LLC. Three payments under the PSA will be made at Mechanical Completion, Substantial Completion, and Final Completion (See Appendix D – Form Purchase and Sale Agreement for definitions and additional details). The Company will not make any progress payments prior to Mechanical Completion.
- 4.5 Wind Projects, Solar Projects, Gas Projects, and Other Non-ITC Qualifying Projects: The PSA will be for the purchase of 100% of the equity interest of the Project LLC at the completion and commissioning of the Project. Payment by I&M to the Bidder will be at or near the Commercial Operation Date (COD). The Company will not make any progress payments.
- 4.6 Prices must be firm, representing best and final bid. Proposals and bid pricing must be valid for at least 180 days after the Proposal Due Date.

5. PPA Bid Price and Structure

- 5.1 Seller shall use Appendix A and any other attachments as needed to fully articulate the pricing of its Proposal.
- 5.2 Wind and Solar Resources: The Bid Price must be for a bundled Renewable Energy Product as described in Section 3.2.1. The Bid Price shall be on an “as-available” per MWh basis with no separate payment for any Renewable Energy Products.



- 5.2.1 Bid Price must be a fixed, non-escalated, “all-in”, around-the-clock price (\$/MWh) for the entire term of the agreement.
 - 5.2.2 Pricing must include all capital costs, fixed and variable O&M costs, taxes and any other costs, as well as any Federal Tax Credit benefits, associated with delivering the full contracted energy output of the facility to the bid-specified Point of Delivery.
 - 5.2.3 Energy Storage Option Bid Pricing must include all costs described in Section 5.2.2 for both the “solar or wind” energy resource and the storage resource necessary to give the Company the right to dispatch and operate the storage resource. The Company shall have the right to dispatch the storage resource at its discretion (within operating limitations) and for its benefit.
- 5.3 Gas Resources: Bidders shall specify in detail the pricing associated with each Energy Product (as described in Section 3.2.2) it wishes to include in its proposal.
- 5.3.1 Pricing provided should be fixed (no escalation) for the proposed monthly capacity payment, while pricing for variable O&M should clearly state the assumed annual escalation. For start charges, Bidders must clearly state the proposed pricing structure (e.g., cost for each charge; a certain minimum threshold of charges included in base pricing, with a cost for each charge above the threshold, etc.). For gas charges, Bidders must clearly state its assumption regarding gas supply as well as the various cost components of gas charges, including: transportation fee, management fee, fuel index, and total delivered price formula capturing each of the aforementioned elements (e.g., $HR \times [(FI + Transportation + Mgmt)/(1-loss\ factor)]$).
 - 5.3.2 Pricing 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.
- 5.4 Energy Storage Resources:
- 5.4.1 Pricing provided should be fixed (no escalation) for the proposed monthly capacity payment. An additional bid may also be submitted if Bidder’s wishes to propose an alternate pricing structure.
 - 5.4.2 Pricing must include all capital costs, fixed and variable O&M costs, taxes, and any other costs, as well as any Federal Tax Credit benefits, associated with delivering the full contracted output of the facility to the bid-specified Point of Delivery. The Company prefers to have the right to dispatch the storage resource at its discretion (within operating limitations) and for its benefit.



- 5.5 Supplemental Capacity Resources: Bidders shall specify in detail the pricing associated with each Supplemental Capacity Product (as described in Section 3.2.3) it wishes to include in its proposal.
- 5.5.1 Proposals that have material contingencies as determined by I&M, such as for financing and/or credit related issues, will not be considered.
- 5.5.2 Bidders should specify any necessary fuel adders associated with their Proposal, including current fuel arrangements and pricing mechanisms.
- 5.6 Bidders for Wind, Solar, and Gas Resources are required to include a Proposal with pricing for a 30-year term, while Proposals for Energy Storage Resources are required to include pricing for a 20-year term. In addition to the required term Proposal, Bidders may submit an additional Proposal with pricing for a term of no less than 15 years. For Supplemental Capacity Resources, Bidders are required to submit a Proposal with pricing for a 5-, 10-, 20-, or 30-year term, recognizing that timing and term length may change to serve a supplemental role in supporting I&M's portfolio needs.
- 5.7 Optional Project size(s) provided cannot be contingent on Bidder selling the remaining portion of the Project to another party via a sale of a portion of the project company or a power purchase agreement.
- 5.8 Proposals must include a buyout option for I&M to purchase the Resource at the end of or prior to the end of the PPA term and a first right to purchase the Resource should the bidder elect to sell the Resource. The provision to exercise such a right to purchase will be included in the terms of the executed PPA with any selected project. The exercising of any such right will be contingent upon, at a minimum, notice from I&M to exercise the right, any due diligence required by I&M including site inspections, and approval from all applicable regulatory authorities.
- 5.9 The Company will pay for Renewable Energy Products, Energy Products, and Supplemental Capacity Products prior to the Delivery Period at the Real-Time Locational Marginal Price (\$/MWh) at the Point of Delivery minus any associated PJM charges.
- 5.10 All costs associated with distribution and/or transmission interconnection (as applicable) and interconnection facilities required for the Project, including any system upgrades, and affected system upgrades, as required by I&M, PJM, or MISO



(including Firm Transmission), shall be included in the Bidder's pricing where appropriate under current FERC orders and rulings.

- 5.11 Prices must be firm, representing best and final bid. Proposals and bid pricing must be valid for acceptance at least 180 days after the Proposal Due Date.
- 5.12 For all PPAs including Capacity, respondents must acknowledge and accept all responsibilities for PJM capacity performance requirements and penalties.
- 5.13 Any proposals claiming eligibility for Bonus Credits under the Inflation Reduction Act (see Section 8.6) shall present a base offer without such Bonus Credit(s) included as well as a separate offer with such Bonus Credit(s) included.

6. RFP Schedule and Proposal Submission

- 6.1 The schedule and deadlines set out in this section apply to this RFP. I&M reserves the right to revise this schedule at any time and at its sole discretion.

RFP Issued	March 31, 2023
Proposal Due Date	May 26, 2023
Bidder(s) Selected for Final Contract Negotiations	September 1, 2023
Contract Execution	January 2024
State Regulatory Filings	February 2024
Receipt of Full Regulatory Approval Order(s)	April 2025
Seller Conditions to NTP achieved	June 2025
Notice to Proceed (NTP)	June 2025
Commercial Operation by	December 2027

- 6.2 Proposals must be complete in all material respects and received no later than 3 p.m. EDT on the Proposal Due Date as defined in Section 7 of this RFP.
- 6.3 Proposals should include an electronic copy of all PJM, MISO, or I&M Studies completed to date for the Project.
- 6.4 Bidders will be required to sign a Confidentiality Agreement (CA) prior to receiving the following documents:
 - Form PSA (Appendix D)
 - Form PPA (Appendix E)
 - AEP Generation Facility Standard (Appendix F)
 - o Wind:
 - GEN 4560 Wind Projects Technical Spec Rev 8
 - o Solar:
 - GEN-4550 Solar Projects Technical Spec Rev 13



- o Energy Storage
 - GEN-4570 BESS Technical Specification Rev 5
 - DC-FP-BATT-01
 - o Gas
 - Generic CT Specifications
 - Scope of Work (Appendix F)
 - WindEnergyInputSheet_2023.xls (Appendix H)
 - SolarProjectModelingInputSheet_2023.xlsx and SolarEnergyInputSheet_2023.xls (Appendix I)
 - Battery Storage Design Criteria Data Sheet_2023.doc (Appendix J)
 - Thermal Data Review Form_2023.doc (Appendix K)
 - Emerging Tech Data Review Form.doc (Appendix L)
 - ProjectLandDecomPropertyTaxes_2023.xls (Appendix M)
 - Project Technical Due Diligence Material (Appendix N)
 - Environmental Wildlife Site Review Form.doc (Appendix O)
 - Local Benefits Support and Supplier Diversity.doc (Appendix P)
 - Rockport Site – Supporting Information for CTs (Appendix R)
 - Rockport Site – Supporting Information for Storage (Appendix S)
- 6.5 Bidders should request I&M's Form CA by emailing IMAllSourceRFP@CRAI.com (or download it from the RFP website: <https://imallsourcerfp.com>) and including the following documentation:
- Verification of Site Control as required by Section 3.8.13
 - Completed interconnection study as follows:
 - PJM Projects: Completed PJM System Impact Study as required by Section 3.9.2, or
 - MISO Projects: Completed Final DPP SIS and Network Upgrade Facilities Study and Firm Transmission into PJM as required by Section 3.9.3, or
 - I&M Distribution Projects: Completed I&M Distribution Impact Study as required by Section 3.9.4.
- 6.6 I&M 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.
- 6.7 Proposals and bid pricing must be valid for at least 180 days after the Proposal Due Date at which time Proposals shall expire unless the Bidder has been notified that its Proposal has been shortlisted.
- 6.8 A Proposal should be as comprehensive as possible to enable the Company to make a definitive and final evaluation of the Proposal's benefits to its customers without further contact with the Bidder.



7. Proposal Submittal

For Proposals that are under 30 MB in size, please submit your Proposal to the Independent Monitor via email at IMAllSourceRFP@crai.com. Please note that the Independent Monitor will always confirm receipt. If you do not receive an email confirmation after submission, please follow up with us as we likely did not receive your submission. Please submit your proposal well prior to the proposal submission deadline to allow time for addressing any issues that may arise during submission.

For Proposals that are over 30 MB in size, or if desired, to ensure proposal delivery regardless of proposal size, at least 2 business days prior to the proposal submission deadline, please contact us via email at IMAllSourceRFP@crai.com for further instructions on how to submit your Proposal via CRA's secure WebTransfer platform. We will provide you with access to the web transfer system in order to submit your proposal files.

One hard copy of the Bidder's complete Proposal shall be submitted within 3 business days of the Proposal Due Date. Hard copies of the Proposal must be identical to the electronic copy submitted on the Proposal Due Date of May 26, 2023. Hard copies shall be submitted to:

American Electric Power Service Corporation
Attn: I&M 2023 All-Source RFP Manager
1 Riverside Plaza (25th Floor)
Columbus, OH 43215

8. Proposal Content

Bidders must submit the following information for Proposals. All electronic versions of the Appendices shall be individual files.

- 8.1 A completed Proposal Content Check Sheet (Appendix Q)
- 8.2 A cover letter signed by an authorized representative of the Bidding Company with a statement of firm pricing for 180 days after the Proposal Due Date.
- 8.3 An executive summary of the Project's characteristics and timeline, including any unique aspects and benefits.
- 8.4 For non-thermal bids, a detailed description of how Projects intend to comply with PWAR tied to full value Federal Tax Credits (e.g., PTCs and ITCs) provided under the Inflation Reduction Act. This includes a detailed description of Bidder's process and tools (e.g., software) for collecting, organizing, and retaining sufficient records to establish compliance with PWAR and ability to timely deliver records for review



during a Project. These records are expected to provide information necessary to make a determination as to whether the Project satisfies PWAR as detailed in IRS Notice 2022-61 and subsequent guidance.

- 8.5 [Reserved.]
- 8.6 For non-thermal bids, detailed information regarding the Project's ability to qualify for Bonus Credits provided under the Inflation Reduction Act.
- 8.7 Detailed information regarding the equipment (e.g. wind turbine, solar module, inverter, energy storage resource, gas turbine, etc.) manufacturer's warranty offering including parts and labor coverage and other key terms.
- 8.8 The identity of all persons and entities that have a direct or indirect ownership interest in the Project.
- 8.9 Completed Appendix A (Project Summary).
- 8.10 A completed Appendix B (Bidder's Credit-Related Information).
- 8.11 A completed Appendix C (Bidder Profile). Bidders must provide a general description of its (including its affiliates) background and experience in the development and construction of at least three projects similar to the Projects sought by the Company in this RFP. In addition, Bidders should provide at least three third-party references for such projects.
- 8.12 A complete list of the Bidder's commercial, legal, and other exceptions to the terms and conditions contained in the applicable Form Purchase Sale Agreement or Form Power Purchase Agreement (Appendix D or Appendix E).
- 8.13 A list of any exceptions it takes to the applicable AEP Generation Facility Standard and Scope of Work (Appendix F).
- 8.14 Any exceptions to AEP Requirements for Connection of Facilities (Appendix G).
- 8.15 All required Resource Analysis / Study Information for the corresponding resource type (Appendix H, Appendix I, Appendix J, Appendix K, or Appendix L).
- 8.16 Bidder's Proposal shall include a completed Appendix M containing expected Land Lease Costs, Decommissioning Costs, and Property Taxes, as well as a written description providing an overview of each of these three categories:
 - Land Lease Costs shall be provided by year for a 30-year operating period. Projects must report all land obligations (e.g., options to lease or purchase land, royalties, easement payments, etc.) to ensure I&M has a full understanding of the all-in costs to support the land rights needed for the proposed Project. Any leases that include revenue-based royalty structures



will need to be amended prior to closing any PSA transaction.

- Decommissioning Costs must include typical costs to remove the facility and restore the site, as well as any bond release or other end-of-life payment obligations.

- Property Taxes must include the current status of efforts to secure abatements or payments-in-lieu-of-taxes (PILOTs) being sought and details about any local or state abatement programs available, or restrictions on such programs, and a written description of how such expenses were calculated.

8.17 Energy Storage Option: Bidders providing an alternate Proposal for a Solar or Wind energy resource with an energy storage resource shall provide this option separate from the base Solar or Wind energy resource only Proposal. This optional Proposal shall include all applicable information from Section 8 in addition to technical, operating, performance, and warranty details associated with the storage resource. Any Energy Storage Project offered with Solar shall comply with the AEP Battery Energy Storage Technical Specification and Design Criteria (Appendix F). This document will be provided to Bidders subsequent to execution of a CA (See Section 6.4 and 6.5).

8.18 All required Technical Due Diligence Material (Appendix N)

8.19 A completed Appendix O (Environmental / Wildlife / Site Information)

8.20 A completed Appendix P (Indiana and Michigan Economic Stimulus Benefits / Community Support / Supplier/Contractor Diversity)

8.21 PSA bids for Operational Projects must contain:

- Historical operational information over the last 5 years (or less if commercial operation was more recent), including:
 - Production data (8760) and availability as well as downtime issues and outlook
 - Congestion and curtailment
 - o Environmental issues and violations
 - o Safety issues
 - o NERC violations and resolution
 - o Major scheduled and unscheduled maintenance matters as well as resolution
 - o Community relations / external affairs issues
 - o Detailed annual operations budgets, including forecasted v. actual
 - Environmental and permitting summary
 - List and description of any outstanding legal matters
 - Facility Site Plan and General Arrangement
 - List of all warranties
 - Staffing



- Summary of material contracts (interconnection agreement, operations & maintenance agreements, etc.) and confirmation that the project is in compliance with all such contracts, including land leases
- Confirmation of whether the project holds firm transmission service and, if applicable, gas transportation capacity and gas supply
- Property tax abatements and/or payments in lieu of taxes
- Commercial operation date
- For solar or wind projects, a description of the tax qualification strategy used to secure Federal Tax Credits for the project

9. RFP Proposal Evaluation

Proposals must include all applicable content requirements as described in Section 8. I&M will consider bids that are reliable, feasible, and represent a reasonable cost means of satisfying the requirements of this RFP. The Evaluation Process, which includes five main steps, is central to the success of I&M's RFP process.

Section 9.1: Eligibility and Threshold Requirements

Section 9.2: Economic Analysis

Section 9.3: Non-Price Analysis

Section 9.4: Resource Selection

Section 9.5: Shortlisted Proposals

9.1 **Eligibility and Threshold Requirements:** If the Bidder does not qualify under any one of the Sections 9.1.1 – 9.1.12, the Bidder will not qualify for this RFP and will be notified accordingly.

- 9.1.1 Proposal must be for a Purchase and Sale Agreement or Power Purchase Agreement for a Wind, Solar, Gas, Energy Storage, or Supplemental Capacity Resource (Section 2.5).
- 9.1.2 Projects must have an Expected COD by 12/15/2027 (Section 3.3).
- 9.1.3 Project must have a minimum nameplate rating of 5 MWac (Section 3.5).
- 9.1.4 Projects must be located in IN, MI, OH or IL for Wind, or IN or MI for Solar, Gas, Energy Storage, and Supplemental Capacity Resources (Section 3.6).
- 9.1.5 Except for Rockport re-use, Bidder must have 1) a completed PJM System Impact Study (Section 3.9.2) and an active queue position in the PJM generator interconnection study process of AG1 (or earlier), 2) a completed MISO Final DPP SIS and Network Upgrade Facilities Study and Firm



Transmission from the Project into PJM (Section 3.9.3), or 3) a completed I&M Distribution Impact Study (Section 3.9.4)

- 9.1.6 Except for Rockport re-use, Bidder must have established Site Control (Section 3.8.13).
- 9.1.7 Project Specific Requirements (Section 3.8.1):
 - 9.1.7.1 Wind Projects: Turbines must be manufactured by GE, Vestas, or Siemens-Gamesa
 - 9.1.7.2 Solar Projects: Solar panels and inverters must be manufactured by approved vendors in the AEP Generation Facility Standard for Solar Facilities
 - 9.1.7.3 Energy Storage Projects: Asset will be, or have been, built using utility grade equipment, components, and materials. The asset design must incorporate prudent utility features for maintainability and safe reliable operation. Energy Storage Projects must be manufactured by approved vendors in the AEP Generation Facility Standard for Battery Energy Storage Systems.
 - 9.1.7.4 Thermal Projects: Asset will be, or have been, built using utility grade equipment, components, and materials. The asset design must incorporate prudent utility features for maintainability and safe reliable operation. Thermal Projects eligible to be considered may include Natural Gas, Biomass, and Biofuels Technologies and proposals must adhere to AEP Generation Facility Standards (See Sections 6.4 and 6.5 for instructions to obtain).
 - 9.1.7.5 Emerging Technology Projects: Asset will be, or have been, built using utility grade equipment, components, and materials. The asset design must incorporate prudent utility features for maintainability and safe reliable operation. In addition, Emerging Technology Projects must be for a proven technology and be commercially feasible.
- 9.1.8 Resource Information: Bidder must submit all required Resource Studies / Information listed in Appendix H (Wind), Appendix I (Solar), Appendix J (Energy Storage), Appendix K (Thermal), and Appendix L (Emerging Technology) for the proposed resource type (Section 3.8.2 –3.8.6).
- 9.1.9 New Wind, Solar, and Gas Projects must have a minimum design life of 30 years and Energy Storage Projects must have a minimum design life of 20 years. The design life for Supplemental Capacity Resources is technology



dependent with a preference for 30 years and a minimum of 15 years (Section 3.8.8).

- 9.1.10 Bidder or its affiliates must have completed the development, engineering, equipment procurement, and construction of a project, within the United States or Canada, of the same technology type, and of a size comparable to that of the Bidder's proposed Project and/or have demonstrated appropriate experience (Appendix A). Bidder is required to include requested financial information (Appendix B) so that AEP's credit department can conduct a financial wherewithal assessment. Bidders must verify receipt of AEP's minimum credit package requirements guidelines provided upon receipt of a completed Confidentiality Agreement. Bidders are required to verify that any costs associated with meeting the credit requirements are included in the submitted bid price.
 - 9.1.11 Bidder's exceptions to the Form PSA and Form PPA must be complete and, considered individually or in the aggregate, minimally acceptable to the Company as a basis for further discussions (Section 8.12). I&M reserves the right to disqualify any Bidder that provides an incomplete list of exceptions (for example, by noting that the Bidder's exceptions list has not been reviewed by certain commercial, functional or legal reviewers and may be supplemented with additional exceptions on further review).
 - 9.1.12 Proposal must include detailed exceptions, if any, to the applicable AEP Generation Facility Standard and Scope of Work in Appendix F. (Section 8.13).
- 9.2 Economic Analysis: During the Economic Analysis phase, I&M will determine three key price evaluation metrics for each of the Proposals:
- 1. Levelized Adjusted Cost of Energy (LACOE)
 - 2. Levelized Adjusted Cost of Capacity (LACOC)
 - 3. Value to Cost Ratio

These metrics and intermediate terms used in the calculation of these metrics are defined below:

- 9.2.1 **Total Cost**: I&M will determine the present value of all the costs of each qualifying Proposal. This total cost calculation is based on the Proposal's Bid Price (\$M), Operations and Maintenance Costs (including Land Lease costs), Tax Expenses, Fuel Costs, Cost of Energy for Charging Storage, Decommissioning Costs (including expected salvage and terminal value), and applicable Federal Tax Credit (Wind or Solar – Production Tax Credit or PTC, Solar or Energy Storage – Investment Tax Credit or ITC). To the extent the asset is not under I&M control at any point in the period, cost will reflect market purchases of bundled Renewable Energy Products, Energy Products,



and Supplemental Capacity Products. In addition, I&M will include the debt equivalence cost of PPAs and transmission congestion cost as determined by the Company's distribution or transmission congestion screening analysis. Other costs may be included based on the Company's discretion to appropriately evaluate each Proposal. This may be done to ensure the Company is comparing all qualifying Proposals on an equivalent basis.

9.2.2 Total Value: I&M will determine the present value of all the value streams of each qualifying Proposal. This total value calculation is based on expected PJM revenues for the Proposal's energy, capacity, and any renewable energy certificates in the PJM market. Additionally, other value streams may be included based on the Company's discretion to appropriately evaluate each Proposal. This may be done to ensure the Company is comparing all qualifying Proposals on an equivalent basis.

9.2.3 Levelized Adjusted Cost of Energy: The LACOE is calculated by dividing the Total Cost by the present value of the Proposal's expected lifetime energy output.

9.2.4 Levelized Adjusted Cost of Capacity: The LACOC will be calculated by dividing the Total Cost by the present value of the Proposal's installed capacity rating.

9.2.5 Value to Cost Ratio: The Value to Cost Ratio will be calculated by dividing the Total Value of the Proposal by the Total Cost of the Proposal.

9.3 Non-Price Analysis:

I&M will consider all applicable factors including, but not limited to, the following factors to determine the viability of the Proposal.

9.3.1 Asset-Specific Benefits and Risks

Contract Term/Asset Life-Related Market Risks

The Company will review the term length, timing, and finite life of the asset with respect to the extent to which the proposal may either expose the Company and its customers to higher than projected market prices and volatility or provide additional flexibility. The review will also consider any contract exceptions related to the Right of First Offer (ROFO) and buyout option for each bid to maximize the Company's ability to adapt to future market conditions, anticipated changes in wholesale contracts, and future load expectations.



Resource Optionality and Flexibility Benefits

The Company will review the bid and associated terms relative to the benefits that would accrue to the Company and its customers with respect to operational flexibility. Key considerations will include the ability for the project to reliably meet energy, capacity, and ancillary service needs under emergency and volatile market conditions; and the enhancement value of the facility with respect to the Project's ability to adapt to current and changing future operational and market needs (ex: storage and new technologies, ability to adapt to new market rules, potential for facility enhancements for alternative fuel sources or carbon reducing technologies, ability to add future storage to the site, etc.).

9.3.2 Development Status and Risks

Development Status, Interconnection Status, and Other Project Completion Risks

The Company will review the development status of the project including, but not limited to the status of land leases, permitting (local and federal), and arrangements with equipment suppliers and contractors. The review will focus on potential risks (e.g. project schedule, equipment supply arrangements) associated with achieving the targeted commercial operations date. Review under this category will also include an assessment of the proposed project's planned interconnection arrangements, with a focus on completeness of the Generation Interconnection process as prescribed by the respective Regional Transmission Organization (RTO), as well as the scope, schedule, and estimated deliverability of the prospective project. For operational projects, this category will evaluate the state of future risks during the proposed term.

Project Timing

The Company will review the likelihood that a project will be online in time to support the timing of near-term capacity needs identified in the Preferred Portfolio in I&M's IRP process. Those projects that can reliably meet commercial operation status earliest will be scored highest.

9.3.3 Environmental, Social, and Economic Impacts/Benefits

Carbon Emissions Goal

AEP is committed to a goal to achieve net zero carbon emissions by 2045,



with an interim target to cut emissions 80% from 2000 levels by 2030. Each bid will be reviewed with respect to its emissions and potential to facilitate non-carbon based fuel sources.

Environmental and Wildlife Impact / Permitting

The Company will review the status of applicable environmental and land use documents associated with the project which may include, but not be limited to: a permit matrix and plan, local land use permit requirements, wetland and waters delineations, cultural and historical resource investigations, wildlife surveys and assessments, habitat assessments, resource agency correspondence and meeting notes, assess the steps bidders are planning for environmental and social justice considerations, Phase I ESAs, and any other available permit documentation.

Indiana and Michigan Economic Stimulus Benefits, Community Support, Supplier/Contractor Diversity, and Environmental & Social Justice

The Company will review the Bidder's proposal for its potential to increase private investment by companies that value proximity to renewable energy sources. This category will also include a review of the economic benefits to local governments and businesses as well as local property and sales tax benefits. Known current or historical community support or opposition for Projects and the bidder's plan for managing community relations will be evaluated. The review will also include consideration of the developer's plan to use small and diverse suppliers and subcontractors, and contractors based in Indiana and Michigan as well as any potential environmental & social justice considerations.

9.3.4 Proposal/Project Quality

Bidder Experience and Financial Wherewithal

The Company will review the Bidder's experience including Bidder's success in completing similar sized projects in the relevant state/jurisdiction, the number and size of successful projects the Bidder has been involved with to-date, and the Bidder's role in the completion of those projects. The Bidder's ability to meet contractual credit requirements through the review of recent financial statements, ability to post collateral and raise capital, and any other relevant financial information including current credit ratings will also be assessed. The Company will evaluate the form of the Bidder's collateral, including potential parent guaranty, and verify that it is acceptable to AEP.

Exceptions to AEP Generation Facility Design Standards



The Company will review the exceptions the Bidder proposed to AEP's Facility Generation Standards and its associated attachments (such as the Scope of Work) for bids that have passed the eligibility & threshold requirements. All exceptions will be considered in the scoring of this category. Prior agreement by AEP in previous negotiations does not constitute acceptance of an exception.

Exceptions to Form PSA or PPA

The Company will review the exceptions the Bidder proposed to the Company's form agreements with a focus on risks or additional costs to the Company for those projects that have passed eligibility & threshold requirements. All exceptions will be considered in the scoring of this category. Prior agreement by AEP in previous negotiations does not constitute acceptance of an exception.

Bidders proposing Operational Projects must have the information provided in their Proposal(s), including the information provided in conjunction with Section 8.19 and Section 8.21, evaluated based on the closest corresponding non-price scoring categories listed above.

9.4 Resource Selection: I&M will incorporate the results of its Economic and Non-Price Analyses to determine an optimized Short List of Proposals through the following steps:

9.4.1 Step 1: I&M will group all Proposals by resource type within the following categories (Resource Type Group):

- 1) Wind (+Storage)
- 2) Solar (+Storage)
- 3) Gas (+ Storage)
- 4) Energy Storage
- 5) Supplemental Capacity Resources

9.4.2 Step 2: I&M will calculate a First Composite Score, made up of LACOE / LACOC (60%) and Non-Price (40%) scores, for each Proposal. The Proposals within each Resource Type Group will be ranked according to this First Composite Score.

9.4.3 Step 3: On the basis of the first Composite Score rankings, I&M will select approximately 1,600 MWac nameplate of Wind (+Storage), approximately 1,700 MWac nameplate of Solar (+Storage), approximately 1,080 MWac of Gas (+Storage), approximately 630 MWac of Energy Storage, and



approximately 100 MWac nameplate of Supplemental Capacity Resources to carry into Step 4.

9.4.4 Step 4: I&M will calculate a Second Composite Score on the Proposals selected from Step 3, made up of Value-to-Cost Ratio (60%) and Non-Price (40%) scores, for the purpose of comparing Proposals across Resource Type Groups. The Proposals will be ranked according to this Second Composite Score.

9.4.5 Step 5: I&M will select the Proposals from the Step 4 ranking to create a portfolio that meets the Company's Accredited Capacity Resource needs (Short List). Selection based on the Step 4 ranking could lead to I&M choosing more or less MWac of wind, solar, gas, or energy storage resources than originally targeted.

The multi-step evaluation process described above is designed to narrow the bids for each resource type (Section 9.2.3) before conducting a comparison across resource types (Section 9.2.4). Depending on the number of proposals received, I&M reserves the right at its sole discretion to pass all bids evaluated in the first step through to the second step for Shortlist selection.

9.5 Shortlisted Proposals: I&M will consider bids that are reliable, feasible and represent a reasonable cost means of satisfying the requirements of this RFP. I&M will identify one or more Shortlisted Bidders for further discussions and negotiations of one or more executable agreements. Bidders not Shortlisted will be notified promptly.

I&M reserves the right to disqualify any Shortlisted Bidder that provides a marked Form PSA or Form PPA that materially departs from their previously submitted exceptions list (see Section 9.1.11).

I&M anticipates that fewer contracts will be executed than the number of Shortlisted bids given current market volatility and uncertainty. Shortlisted bidders are not guaranteed award of a contract.

10. Reservation of Rights

A Proposal will be deemed accepted only when the Company and the successful Bidder have executed either a definitive Purchase Sale Agreement for the Company's acquisition of the Project or a Power Purchase Agreement. The Company has no obligation to accept any Proposal, whether or not the stated price in such Proposal is the lowest price offered, and the Company may reject any Proposal in its sole discretion and without any obligation to disclose the reason or reasons for rejection.



By participating in the RFP process, each bidder agrees that any and all information furnished by or on behalf of the Company in connection with the RFP is provided without any representation or warranty, express or implied, as to the usefulness, accuracy, or completeness of such information, and neither the Company nor its Affiliates nor any of their personnel or representatives shall have any liability to any bidder or its personnel or representatives relating to or arising from the use of or reliance upon any such information or any errors or omissions therein.

The Company reserves the right to modify or withdraw this RFP, to negotiate with any and all qualified Bidders to resolve any and all technical or contractual issues, or to reject any or all Proposals and to terminate negotiations with any Bidder at any time in its sole discretion. The Company reserves the right, at any time and from time to time, without prior notice and without specifying any reason and, in its sole discretion, to (a) cancel, modify or withdraw this RFP, reject any and all Proposals, and terminate negotiations at any time during the RFP process; (b) discuss with a Bidder and its advisors the terms of any Proposal and obtain clarification from the Bidder and its advisors concerning the Proposal; (c) consider all Proposals to be the property of the Company, subject to the provisions of this RFP relating to confidentiality and any confidentiality agreement executed in connection with this RFP, and destroy or archive any information or materials developed by or submitted to the Company in this RFP; (d) request from a Bidder information that is not explicitly detailed in this RFP, but which may be useful for evaluation of that Bidder's Proposal; (e) determine which Proposals to accept, favor, pursue or reject; (f) reject any Proposals that are not complete or contain irregularities, or waive irregularities in any Proposal that is submitted; (g) accept Proposals that do not provide the lowest evaluated cost; (h) determine which Bidders are allowed to participate in the RFP, including disqualifying a Bidder due to a change in the qualifications of the Bidder or in the event that the Company determines that the Bidder's participation in the RFP has failed to conform to the requirements of the RFP; (i) conduct negotiations with any or all Bidders or other persons or with no Bidders or other persons; (j) execute one or more definitive agreements with any Bidder, and (k) utilize a Bidder's completed Appendices and any supplemental information submitted by the Bidder in any of its regulatory filings.

The Company has seen variable prices throughout many sectors needed to bid and develop a project due to the coronavirus pandemic, supply chain shortages, shipping delays, tariff uncertainty, and a war in Europe. The Company believes this may, in the short term, until such markets settle, result in higher bid prices to account for potential market risks. Allowing potential Short List projects to have the opportunity to submit a downward price adjustments to their project will provide time for projects to further understand current markets and allow projects to further refine their costs, hopefully resulting in lower costs for customers. As such, the Company reserves the right, at its sole discretion, and in coordination with the Independent Monitor, to request Best and Final Offer ("BAFO") pricing from potential Shortlisted proposers during the bid selection process.



11. Confidentiality

I&M 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. I&M reserves the right to release any proposals to agents or consultants for purposes of proposal evaluation. I&M'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 or in proceedings before 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, I&M and AEPSC will make reasonable efforts to protect Bidder's confidential information.

12. Bidder's Responsibilities

- 12.1 It is the Bidder's responsibility to submit all requested material by the deadlines specified in this RFP.
- 12.2 The Bidder should make its proposal as comprehensive as possible so that I&M may make a definitive and final evaluation of the proposal's benefits to its customers without further contact with the Bidder.
- 12.3 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.
- 12.4 The Bidder will be responsible for any expenses Bidder incurs in connection with the preparation and submission of a Proposal and/or any subsequent negotiations regarding a Proposal in response to this RFP. I&M will not reimburse Bidders for their expenses under any circumstances, regardless of whether the RFP process proceeds to a successful conclusion or is abandoned by I&M at its sole discretion.

13. Contacts

- 13.1 General RFP Questions: All correspondence and questions, with the exception of interconnection related questions, regarding this RFP should be directed to:

To: IMAllSourceRFP@CRAI.com

- 13.2 PJM Interconnection: All correspondence and questions regarding the PJM Interconnection process can be found at:

PJM Interconnection

<https://www.pjm.com/planning/services-requests/new-service-requests>



- 13.3 MISO Interconnection: All correspondence and questions regarding the MISO Interconnection process can be found at:

MISO Interconnection

<https://www.misoenergy.org/planning/generator-interconnection/>



Appendix A

Project Summary

A1. Company Information

Bidder (Company):		
Contact Name:		
Contact Title:		
Address:		
City:	State:	Zip Code:
Work Phone:	Cell Phone:	
Email Address:		
Is the Proposal being submitted through a partnership, joint venture, consortium, or other association? _____. If so, please identify all partners, joint ventures, members, or other entities or persons comprising same.		
Additional company information to be provided in Appendix B – Bidder's Credit-Related Information and Appendix C – Bidder's Profile		

A2. General Project Information

Project Name:	
Resource Type: (e.g. Wind, Solar, Energy Storage, NG Simple Cycle, Combined Cycle, etc.):	
Project site located (County, State):	
PJM Queue #:	PJM Study Status:
Expected Commercial Operation Date:	
Design Life (Years); if Operational Project, also include estimated remaining useful life:	
Bidder confirms that it has substantial Project site control	(Y/N):
Is the proposal for 100% of the asset? (Y/N) If no, what percentage?	%



A3. Wind Project Information

Percentage of Federal Production Tax Credit that Project will qualify for:		%
Turbine Manufacturer:	Model Number:	
Number of Turbines:		
Turbine Specific Site Suitability Report completed & included in proposal?		(Y/N):
Independent wind report / analysis completed and included in proposal?		(Y/N):
Source of wind energy forecast:		
Wind Project Nameplate (MWac): Wind Project Nameplate (MWdc): Wind Project Capacity Factor (%):	Expected Annual Availability (%):	
<i>Additional Wind Project information to be provided in Appendix H – Wind Resource Information</i>		

A4. Solar Project Information

Percentage of Federal Production Tax Credit that the Project will qualify for:		%
Module Manufacturer / Model:	Annual Degradation (%):	
Configuration (Fixed Tilt / Single Axis):		
Inverter Manufacturer / Model:		
Solar Project Nameplate (MWac): Solar Project Nameplate (MWdc): Solar Project Capacity Factor (%):	Expected Annual Availability (%):	
Solar report / analysis (e.g., PVSyst) completed and included in proposal?		(Y/N):
<i>Additional Solar Project information to be provided in Appendix I – Solar Resource Information</i>		

A5. Energy Storage Option Information (co-located with Wind or Solar Projects)

Storage Resource Description:
Duration (Hours):



Nameplate rating (MWac) of the co-located energy storage system as a percentage of the nameplate rating (MWac) of the Solar or Wind energy resource (one required offer at 20%; additional offers may exceed 20%):				%
Economic Life Assumption (Years):				
Project Capacity Values, MWac	Nameplate Rating	Winter Rating	Summer Rating	PJM Capacity Value
<i>Additional Storage Project information to be provided in Appendix J – Storage Resource Information</i>				

A6. Energy Storage Project Information

Storage Resource Description:				
Duration (Hours):				
Economic Life Assumption (Years):				
Project Capacity Values, MWac	Nameplate Rating	Winter Rating	Summer Rating	PJM Capacity Value
<i>Additional Storage Project information to be provided in Appendix J – Storage Resource Information</i>				

A7. Thermal Project Information

Fuel Type (Primary / Secondary):				
Project Capacity Values, MWac	Nameplate Rating	Winter Rating	Summer Rating	PJM Capacity Value
<i>Additional Thermal Project information to be provided in Appendix K – Thermal Resource Information</i>				

A8. Emerging Technology Project Information

Resource Description:				
Economic life assumption:				



Project Capacity Values, MWac	Nameplate Rating	Winter Rating	Summer Rating	PJM Capacity Value
<i>Additional Emerging Technology Project information to be provided in Appendix L – Emerging Technology Resource Information</i>				

A9. PSA Proposal Bid Pricing

Base Wind, Solar, or Gas Proposal				
Expected Transfer by	Equipment Manufacturer	Expected Annual Energy (if solar, year 1)	Capacity Factor (if solar, year 1)	Bid Price, \$
December 15, 2027				\$
Remaining Economic Life Assumption (Years):				
Does Bid Price include the use of union labor?				(Y/N):

Base Wind or Solar Proposal with Energy Storage Option				
Expected COD by	Equipment Manufacturer	Expected Annual Energy	Capacity Factor	Bid Price, \$
December 15, 2027				\$
Remaining Economic Life Assumption (Years):				
Does Bid Price include the use of union labor?				(Y/N):

Base Energy Storage Proposal				
Expected COD by	Equipment Manufacturer	Nameplate (MW / MWh)		Bid Price, \$
December 15, 2027				\$
Remaining Economic Life Assumption (Years):				
Does Bid Price include the use of union labor?				(Y/N):



A10. PPA Proposal Bid Pricing

Wind or Solar Base Proposal							
Expected Commence Date	PPA Term	Expected Annual Energy (if solar, year 1)	Capacity Factor (if solar, year 1)	Bundled Price \$/MWh			
December 15, 2027							
Wind or Solar Base Proposal with Storage Option							
Expected Commence Date	PPA Term	Expected Annual Energy (if solar, year 1)	Capacity Factor (if solar, year 1)	Bundled Price \$/MWh			
December 15, 2027				\$			
Gas Base Proposal							
Expected Commence Date	PPA Term and Expected Annual Energy	Capacity Payment (\$/kW-month)	Variable O&M Charge	Start Charges			
December 15, 2027				\$			
Energy Storage Proposal							
Expected Commence Date	PPA Term	Capacity Payment (\$/kW-month)	Alternative Proposed PPA Price Structure				
December 15, 2027				\$			
Supplemental Capacity Proposal							
Expected Commence Date	PPA Term	Expected Annual Energy	Capacity Factor	Energy Price \$/MWh	Capacity Price \$/MWh	Ancillary Services Price \$/MWh	Environmental Attribute Price \$/MWh
December 15, 2027							
Specify necessary fuel adders, including current fuel arrangements and pricing mechanisms:							
Does Bid Price include the use of union labor?							(Y/N):



Optional size(s) provided cannot be contingent on Bidder selling the remaining portion of the Project to another party via a sale of a portion of the project company or a power purchase agreement.

A11. Interconnection (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:
Facilities Study Complete (Y/N):	Anticipated Facilities Study Completion Date:
Total Network Upgrade Costs (including Affected System Network Upgrade Costs) Allocated to Project from System Impact Study or Facilities Study if completed:	\$
Total Direct Interconnection costs from System Impact Study or Facilities Study if completed:	\$
Point of Interconnection with :	
Types of transmission service (NRIS, ERIS)	
PJM Interconnection Status, including description of any communication with PJM specifically indicating project status related to recently proposed PJM Queue Reform (i.e. "Fast Lane") (describe):	
<i>Please attach a copy of all interconnection studies and/or the expected completion date(s).</i>	

A12. Interconnection (MISO)

MISO Project #:	Substation Name / Voltage:
Phase 2 Complete (Y/N):	Phase 2 Report Date:
Phase 3 Complete (Y/N):	Phase 3 Report Date:
Point of Interconnection with :	
Types of transmission service (NRIS, ERIS)	
Firm Deliverability into PJM?	(Y/N)
If no, cost estimated with securing such deliverability?	\$



MISO Interconnection Status, including status of any Storage (describe):

Please attach a copy of all interconnection studies and/or the expected completion date(s).

A13. Environmental, Wildlife, Land Use and 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:
Have you contacted all required permitting agencies regarding this project and identified all necessary permits?	
Local (County, City, etc.) (Y / N):	
State (Y / N):	
Federal (Y / N):	
Wildlife Resources (Federal, State, etc.) (Y / N):	
Other (Y / N):	
Are there any Federal, State, or Tribal lands in the vicinity (within 1 mile) of the project?	
What is the current status of Bidder's FAA permitting process? Has the project been issued Determination of No Hazard? (For the entire project? For a portion of the project? If so, when is the expiration date?)	
Has habitat for any rare, threatened, or endangered species been identified within the vicinity (within 1 mile) of the project? If so, for what species?	
If habitat has been identified in the project vicinity, what is the current status of consultations with the U.S. Fish and Wildlife Service or applicable state agency?	
<i>Additional Site information provided in Appendix O – Environmental, Wildlife, Land Use and Site Information</i>	

A14. Projects Completed of the Same Technology Type



Provide a summary of all projects (≥ 5 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	MWac	Bidder's Role
Total MWac =			

Please provide a summary of the operating history of previously built projects (≥ 5 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. Moody's:
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.
Ability to Post Collateral and Raise Capital: Please provide a narrative describing the Bidders' ability and plan to both post collateral and raise capital to facilitate the development and construction of the project.



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 the development of projects of the same technology as the proposed project.

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

Form Purchase and Sale Agreement (PSA)

See Sections 6.4 and 6.5 for instructions to obtain the Form Purchase and Sale Agreement.



Appendix E

Form Power Purchase Agreement (PPA)

See Sections 6.4 and 6.5 for instructions to obtain the Form Power Purchase Agreement



Appendix F

AEP Generation Facility Standard

See Sections 6.4 and 6.5 for instructions to obtain the applicable AEP Generation Facility Standard and Scope of Work.

- Generic CT Specifications
- Gen 4550 Rev.13
- Gen 4560 Rev.8
- Gen 4551 Performance Test Requirements Rev. 3
- Gen 4570 BESS Technical Specification Rev. 5
- DC-FP-BATT-01
- Scope of Work documents



Appendix G

AEP Requirements for Connection of Facilities

Please follow the link below to access the AEP Requirements for Connection of Facilities (“Requirements for Connection of New Facilities or Changes to Operational Facilities Connected to the AEP Transmission System”).

[https://www.aep.com/assets/docs/requiredpostings/TransmissionStudies/Requirements/AEP Interconnection Requirements Rev4.pdf](https://www.aep.com/assets/docs/requiredpostings/TransmissionStudies/Requirements/AEP%20Interconnection%20Requirements%20Rev4.pdf)



Appendix H

Wind Resource Information

Required Information

- Attach the independent wind energy report
 - Wind report shall also include P50, P75, P90, P95 and P99 production estimates with 1, 5, 10, 20 and 30 year timeframes
 - Independent consultant information (resume, contact information) if not included in the wind energy report.
- Describe on-site meteorological campaign including:
 - Number of met towers
 - Height of met towers
 - Remote sensing (lidar and/or sodar)
 - Number of years of data for each tower / remote sensing device.
- Identify any wind direction sector management or other operation restrictions.
- Experience of developer in IN, MI, IL, or OH. Identify the number of projects, years each project has been operating, turbine models and capacity rating.
- Source and basis of the wind speed data used in the development of energy projections for the project. Explain all assumptions for wake losses, line losses, etc. and the location where the data was measured.
- Wind turbine power curve adjusted for the site's specific air density.
- Provide a description of the system intended to provide real-time telemetry data.
- Attach an 8760 calendar year hourly energy forecast, net of all losses, and Auxiliary Load and Station Power the Project expects to consume (See Section 6.4 and 6.5 for instructions to obtain the WindEnergyInputSheet_2023.xls.)
- Bidders shall provide a summary of representative wind data with measurement height referenced and any extrapolations used to estimate the wind speeds at the proposed hub height. (This item shall be provided in the electronic version of the Proposal only.)

The following information should be available upon request; however, is not required with the submission of the Proposal.

- Project boundary (shape files, kmz files, or pdf on USGS topographic map)
- Land control, broken down by leased land, likely to be leased land, likely NOT to be leased land, and indeterminate status (shape files, kmz are best)
- Setbacks/exclusions (shape files preferred),
- Met tower installation commissioning sheets and all subsequent maintenance documents
- Raw data files for all on-site met towers
- If applicable, sodar or lidar documentation and raw data files
- Proposed turbine locations (shape file, kmz file, Excel file with coordinates, including map datum (e.g., WGS84, NAD83))
- All documents related to turbine availability, electrical system design with losses
- Any other material that Bidders have used to inform infrastructure setbacks and layout



Appendix I

Solar Resource Information

See Sections 6.4 and 6.5 for instructions to obtain any of the documents identified below:

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. Bidder must populate the data required in the Company's "Solar Data Review Form" spreadsheet.
3. Bidder must attach an 8760 calendar year hourly energy forecast, net of all losses using the Company's form spreadsheet (SolarEnergyInputSheet_2023.xls). Bidders should also provide the corresponding PVSyst or comparable energy modeling output, and Auxiliary Load and Station Power the Project expects to consume.
4. Bidder must supply the Project Layout along with the contour and elevation data in CAD format.
5. Bidder must identify its choice in Approved Module Manufacturer and Approved Inverter Manufacturer associated with the bid and provide the applicable production data (Expected Year 1 Energy Production, Year 1 Capacity Factor). Bidder shall attach module and inverter warranty information with its proposal.
6. If Bidder has not finalized Module Manufacturer, they must identify the module options and provide the applicable production data (Expected Year 1 Energy Production, Year 1 Capacity Factor) for each module manufacturer. Bidder shall attach module warranty information with its proposal.

The following information should be available upon request; however, is not required with the submission of the Proposal.

- Project boundary (shape files, kmz files)
- Land control, broken down by leased land, likely to be leased land, likely NOT to be leased land, and indeterminate status (shape files, kmz are best)
- Setbacks/exclusions (shape files preferred),
- Proposed solar infrastructure locations (shape file, kmz file)
- All documents related to module availability, electrical system design with losses
- Any other material that bidders have used to inform infrastructure setbacks and layout



Appendix J

Storage Resource Information

See Sections 6.4 and 6.5 for instructions to obtain any of the documents identified below:

1. Bidder must populate the data required in the Company's following document:
 - Battery Storage Design Criteria Data Sheet_2023



Appendix K

Thermal Resource Information

See Sections 6.4 and 6.5 for instructions to obtain any of the documents identified below:

1. Bidder must populate the data required in the Company's following document:
 - Thermal Data Review Form_2023



Appendix L

Emerging Technology Resource Information

See Sections 6.4 and 6.5 for instructions to obtain any of the documents identified below:

1. Bidder must populate the data required in the Company's "Emerging Tech Data Review Form" document.



Appendix M

Project Land Lease Costs / Decommissioning Costs / Property Taxes

See Sections 6.4 and 6.5 for instructions to obtain any of the documents identified below:

1. Bidder must populate the data required in the Company's "ProjectLandDecomPropertyTaxes_2023.xls" spreadsheet. Information to be provided shall include:
 - a. Expected Land Lease Costs by year for at least a 35-year operating period. The Land Lease Costs will be used in the Economic Analysis
 - b. Estimated decommissioning costs (including separately specifying salvage value). In addition, Bidder shall provide any associated decommissioning studies
 - c. Expected property taxes, including any abatements or payments in lieu of taxes, along with a written description of how such figures were determined/calculated



Appendix N

Project Technical Due Diligence Material

See Sections 6.4 and 6.5 for instructions to obtain the Project Technical Due Diligence Material List.

This list will include basic technical due diligence material that the Company will require to perform an initial technical due diligence of the Project.



Appendix O

Environmental / Wildlife / Site Information

1. Bidder must populate the data required in the Company's "Environmental Wildlife Site Review Form" document (*See Sections 6.4 and 6.5 for instructions to obtain*).
2. Bidder must include the following attachments (referenced to Appendix O)
 - a. Site Layout: Attach a diagram identifying anticipated placement of major equipment and other project facilities, including transmission layouts and Point of Delivery.
 - b. Site Control: Verify site control and reference documentation provided under Appendix N.
 - c. Permit Matrix: List and describe all city, county, state and federal permits required for this project. Include: status, duration, planned steps, any known mitigation requirements, critical milestones, and timelines.
 - d. Environmental Report Summary: The initial Proposals shall include a summary of all environmental studies, reports and agency meetings associated with the Project. (See below for potential reports to summarize, include data summaries, results and findings)
3. Please attach any reports providing environmental information specific to the project, including but not limited to, the following reports as available:
 - a. Critical Issues Analysis
 - b. Site Characterization Assessment and Reports
 - c. Environmental Work / Survey Plan
 - d. Federal / State Rare, Threatened, or Endangered Species Assessments and Surveys
 - e. Bat Acoustic Survey Report
 - f. Avian Use Survey Report
 - g. Raptor Nest Survey Report
 - h. Prey-base Survey Report
 - i. Wetland and Waters Delineation / Assessment Report
 - j. Phase I Environmental Site Assessment Report
 - k. Historical and Cultural Resource Survey / Assessment Report
 - l. All Other Environmental Resource Surveys, Assessments, and Study Reports
 - m. Record and Notes of all Federal and/or State Resource Agency Correspondence and Meetings
 - n. Environmental Justice Analyses
 - o. Aviation / FAA and Glare Studies
 - p. Radar Study
 - q. Noise and Shadow Flicker Study
 - r. Associated Project Infrastructure and Environmental Resource Shapefiles (.kmz format)



- s. Bird and Bat Conservation Strategy and Eagle Conservation Plan (if available)



Appendix P

Indiana and Michigan Economic Stimulus Benefits / Community Support / Supplier/Contractor Diversity

See Sections 6.4 and 6.5 for instructions to obtain any of the documents identified below:

1. Bidder must populate the data required in the Company's "Local Benefits Support and Supplier Diversity" document.



Appendix Q

Proposal Content Check Sheet

Section	Item	Completed
8.2	Cover Letter with Statement of Firm Pricing	
8.3	Executive Summary	
8.4	Summary PWAR Approach (for non-thermal proposals)	
8.5	[Reserved.]	
8.6	IRA Bonus Credits Qualification	
8.7	Equipment Warranty Information	
8.8	Identity of Persons / Ownership	
8.9	Appendix A (Project Summary)	
	- Company & Generation Project Information	
	- Bid Pricing	
	o Module/Turbine/Storage warranty information	
	- Interconnection and Point of Delivery	
	o Attach copies of all interconnection studies / completion dates	
	- Environmental, Wildlife, Land Use and Site Information	
	- Projects Completed of the same generation type	
8.10	Appendix B (Bidder's Credit Related Information)	
8.11	Appendix C (Bidder Profile)	
8.12	Appendix D (Exceptions to Form PSA) or	
8.12	Appendix E (Exceptions to Form PPA)	
8.13	Appendix F (Exceptions to AEP Wind or Solar Generation Standard)	
8.14	Appendix G (Exceptions to AEP Requirements for Connection of Facilities)	
8.15	Required Resource Analysis / Study Information	
	- Appendix H (Wind Resource Information), if applicable	
	- Appendix I (Solar Resource Information), if applicable	
	- Appendix J (Energy Storage Resource Information), if applicable	
	- Appendix K (Thermal Resource Information), if applicable	
	- Appendix L (Emerging Technology Resource Information), if applicable	



8.16	Appendix M Projected Land Lease, Decommissioning Costs, and Property Taxes	
8.17	Energy Storage Information (Optional; for pairing with wind or solar)	
8.18	Appendix N Project Technical Due Diligence Material	
8.19	Appendix O Environmental / Wildlife / Site Information	
8.20	Appendix P Indiana and Michigan Economic Stimulus Benefits / Community Support / Supplier/Contractor Diversity	
8.21	Operational Projects bidding PSA-information requested in Section 8.21	



Appendix R

Rockport Site – Supporting Information for CTs

See Sections 6.4 and 6.5 for instructions to obtain any of the documents identified below:

All documents that were listed in the Draft RFP have been incorporated in the following documents and re-characterized. See below for documents that will be distributed to post-CA status bidders:

- Rockport New Generation Project EPC Specification – 418162-43407-00-EM-SPC-00001-RB
- Appendix R-A - General Arrangements
- Appendix R-B - Process Flow Diagrams (PFDs)
- Appendix R-C - Site Specific Datasheets
- Appendix R-D - CTG Specs and Datasheets
- Appendix R-E - Existing Geotechnical and Seismic Data and Reports
- Appendix R-F - EPC Fill-In Datasheets
- Appendix R-G - Existing Underground
- Appendix R-H – Conceptual One-Lines
- Appendix R-J – Construction Power
- Appendix R-K – Coatings Specifications
- Appendix R-L – EPC Supplier Data Requirements
- Appendix R-M – Well Water Reports
- Appendix R-N – Environmental
- Appendix R-U – AEP Table 10 and Standards
- Appendix R-Z – Interconnection Requirements
- RK CT Specification
- Thermal Data Review Form_2023
- Regulated Materials Assessment

Note: There is no Appendix R-“I”, or R-O thru R-T. These prior specs have been incorporated within the listed Appendices.



Appendix S

Rockport Site – Supporting Information for Storage

See Sections 6.4 and 6.5 for instructions to obtain any of the documents identified below:

All documents that were listed in the Draft RFP have been incorporated in the following documents and re-characterized. See below for documents that will be distributed to post-CA status bidders:

- Appendix R-A - General Arrangements
- Appendix R-C - Site Specific Datasheets
- Appendix R-E - Existing Geotechnical and Seismic Data and Reports
- Appendix R-G - Existing Underground
- Appendix R-H - Conceptual One-Lines
- Appendix R-J - Construction Power
- Appendix R-K - Coatings Specifications
- Appendix R-N - Environmental
- Appendix R-Z - Interconnection Requirements
- GEN-4570 BESS Technical Specification Rev 5
- Battery Storage Design Criteria Data Sheet_2023
- DC-FP-BATT-01

Category	Wind (Storage Optional)	Solar (Storage Optional)	Gas	Standalone Storage	Supplemental Capacity Resources
Nameplate Capacity	Approximately 800 MW	Approximately 850 MW; <i>consider up to 300 MW paired with storage</i>	Approximately 540 MW	Approximately 315 MW, <i>consider up to 60 MW paired with solar</i>	Supplemental capacity to meet overall portfolio capacity need and timing
Location	Indiana, Michigan, Ohio, or Illinois	Indiana or Michigan			
Interconnection	1) PJM – except for Rockport re-use, must be in queue AG1 (or earlier) 2) MISO, w/ bidder being responsible for securing Firm Transmission from the project in MISO to PJM 3) I&M distribution interconnected projects				
Interconnection Study Status	Completed Impact Study from either PJM, or AEP if on the AEP I&M distribution system. For MISO connected projects, must have completed phase 3 of MISO’s Definitive Planning Phase, and have the Final DPP SIS and Network Upgrade Facilities Study, and have secured Firm Transmission into PJM.				
Storage Option	Proposals must be ≥ 20% of nameplate rating of the project and 4 hours of storage; will also consider 6- and 8-hour storage		N/A	4 hours of storage, directly interconnected to AEPs transmission or distribution system; 6- and 8- hours optional	4 hours of storage; 6- and 8- hours optional

Category	Wind (Storage Optional)	Solar (Storage Optional)	Gas	Standalone Storage	Supplemental Capacity Resources
Minimum Contracted Offtake Size	5 MW				
Minimum PSA Design Life	30 year			Minimum of 20 year (technology dependent)	Minimum 15 year, but preferred 30 year (technology dependent)
Minimum PPA Term	15 year (and required to show a 30 year option)			15 year (with requirement to show 20 year option)	5, 10, 20, or 30, with recognition that timing and term length may change to serve supplemental role to I&M's portfolio
PPA Price Structure	Fixed price / Non-Escalating All-in around-the-clock price		Tolling Agreement with Firm Fuel Supply Agreement	Technology Dependent	

Attachment JTD-3C
Confidential Highly Competitively Sensitive – Bid Scoring Sheet
[Confidential Excel File – Not Reproduced Herein]