

Stakeholder Meeting

**Indiana Michigan Power Company
All-Source RFP Development Meeting**

February 10, 2023

Hosted by Charles River Associates



Welcome

Questions will be answered only after the prepared presentation

- Send an email to IMAllSourceRFP@crai.com or
- Raise your hand in the Microsoft Teams webinar platform and your microphone will be enabled (you must unmute first to be heard)
- **Note:** If you wish to remain anonymous, please send us an e-mail. By speaking on the Teams webinar, your name will be visible to all participants.

Following the prepared presentation...

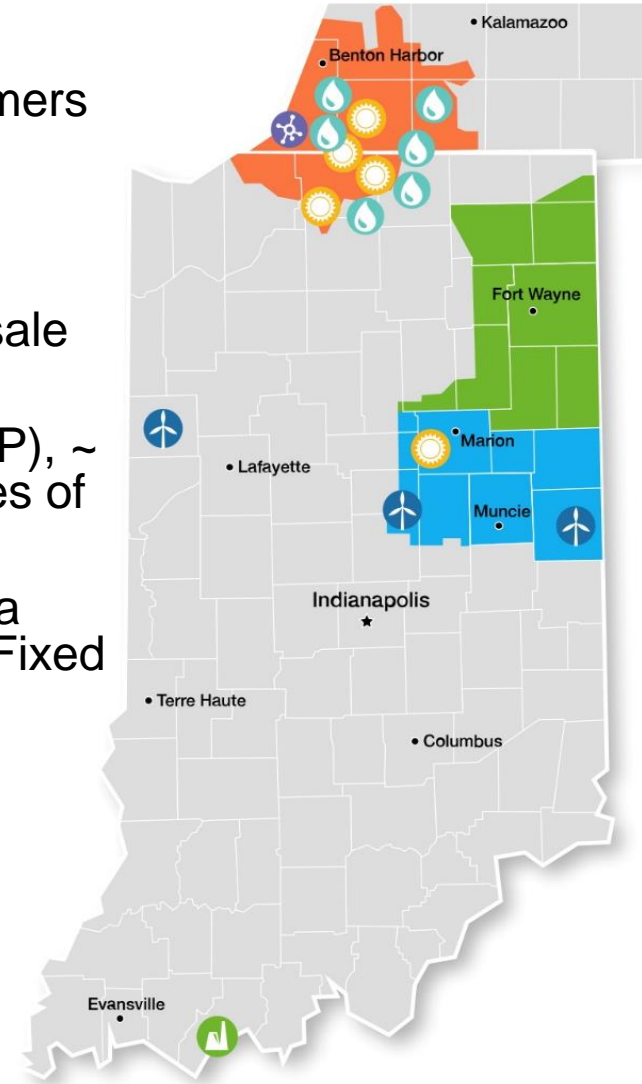
- Participants will be directed to raise their hand should they have a question
- Questions received via the e-mail box will be answered after direct questions
- Substantive questions will be posted on the RFP website; questions answered during this presentation are to be considered preliminary. Official responses will be provided on the website.

Agenda

- Introduction to I&M
- Introduction of CRA as the Independent Monitor
- The role of the Independent Monitor in the RFP
- Scope of the All-Source RFP
- Evaluation Criteria
- RFP Development Process and Timeline
- Stakeholder Feedback Process
- Q&A

Introduction to I&M

- Multi-jurisdictional utility with ~ 600,000 retail customers in Indiana and Michigan
 - Indiana: ~478,000
 - Michigan: ~131,000
- ~390 MW of firm long-term full requirements wholesale generation customers
- Fully integrated with ~4,200 MW of generation (ICAP), ~ 5,300 miles of transmission lines, and ~ 20,600 miles of distribution lines
- I&M is part of the American Electric Power system, a member of PJM Interconnection, LLC (PJM) and a Fixed Resource Requirement (FRR) entity
- Resource diversity, including
 - Nuclear, Coal, Solar, Wind, Hydro
 - ~ 300 MW of demand response
 - 90+% of renewables under PPA
 - 2022 All-Source RFP resources



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Introduction of CRA

- Indiana Michigan Power Company (“I&M”) has retained Charles River Associates (CRA) as the Independent Monitor.
- CRA is a global consulting firm that offers economic, financial, and strategic expertise.
- CRA has served in a variety of capacities in the management, execution and oversight of electric power industry procurements and auctions across the U.S.

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Role of the Independent Monitor

- CRA will lead and manage the stakeholder outreach process, in addition to reviewing and providing feedback on the design and development of the RFP and monitor all aspects of the RFP administration from issuance through selection.
- In addition, as part of the RFP monitoring role, CRA will perform, independently from I&M, the review of each proposal's conformance with the minimum requirements established in the RFP (Threshold and Eligibility Determination).
- At the conclusion of the RFP process, CRA will provide a report which reflects the feedback received as part of the stakeholder process, and how the feedback was considered in the RFP development and process.

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Scope of the All-Source RFP

Resource Requirements

- Indiana Michigan Power is currently developing an All-Source RFP which seeks to secure the resources outlined in its preferred portfolio developed as part of the 2021 Integrated Resource Plan (IRP).
- Consistent with this portfolio, I&M seeks approximately:
 - 800 MW of wind resources,
 - 850 MW of solar resources (with 300 MW paired with 60 MW of storage),
 - 315 MW of energy storage resources (with 60 MW of storage paired with 300 MW of solar),
 - 540 MW of gas CTs,
 - and other qualified capacity resources from thermal, emerging technologies, and other capacity resources to meet overall capacity portfolio requirements.

Rockport Site

Available for bidders

- 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
- Land rights would be made available to bidders
- Interconnection rights would be made available to bidders consistent with PJM procedures
- When the final RFP is released, a package of development assets will be made available (e.g., location available for CTs, location for storage, geotech, land surveys, engineering & design documents)
- Requirements for Rockport CT proposals:
 - The technology will be limited to GE, Siemens, or Mitsubishi
 - Total net output up to ~540 MW
 - Two (2) “F” or “G” class CTGs. Designs with SCR’s will not be considered at this time
 - Utilized in simple cycle configuration for once daily cyclic duty, fast start and ramp rates, and low minimum emission compliance (MECL) load rating
 - The CTGs will be operated as peaker units with about 20% base load capacity factor on an annual basis
 - The combustion turbine shall be designed for operation on 100% natural gas with dry low NOx (DLN) combustors
 - Maximum NOx emission shall be 9 ppmvd @ 15% O2. SCR’s will not be considered
 - Power Augmentation with evaporative cooling or wet compression (Option)
 - Optional pricing for black start capability utilizing 3 existing generators and adding 2 additional
 - Bidders required to provide space for hydrogen and/or carbon capture in their design, although no associated pricing is required
- Note: the CT requirements above are applicable to the Rockport site only. The RFP will include requirements for CT bids on non-Rockport sites
- For interested bidders, a pre-bid site visit will be available to review the site, discuss the proposed layout and bids specifications, and answer any questions

Scope of the All-Source RFP

Resource Requirements

Category	Wind (Storage Optional)	Solar (Storage Optional)	Gas (Storage Optional)	Standalone Storage	Supplemental Capacity Resources
Ownership Structure	Purchase and Sale Agreement (PSA) or Power Purchase Agreement (PPA) *				
Affiliate or Self Build	No				
Nameplate Capacity	Targeting 800 MW	Targeting 850 MW; <i>consider up to 300 MW paired with 60 MW of storage</i>	Targeting 540 MW	Targeting 315 MW, <i>consider up to 60 MW paired with solar</i>	Supplemental capacity to meet overall portfolio capacity need and timing
Target COD/ Commencement Date	No later than 12/15/2027				
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	Limited to ≤ 20% of nameplate rating of the project and 4 hours of storage; will also consider 6- and 8-hour storage			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

* For PSAs, bidder to develop, design, engineer, procure, construct, commission, test, and start up complete project. For PPAs including capacity, bidders are responsible for all PJM capacity performance requirements and penalties.

Scope of the All-Source RFP

Resource Requirements

Category	Wind (Storage Optional)	Solar (Storage Optional)	Gas (Storage Optional)	Standalone Storage	Supplemental Capacity Resources
Carbon Emissions Requirement	N/A	N/A	N/A	N/A	Must have a low carbon emissions or mitigating technology
Emerging Technologies	N/A	N/A	N/A	Technology needs to have demonstrated feasibility, be commercialized, and qualify as a Capacity Resource under the PJM Tariff	
Labor Rates	Union labor preferred; non-thermal bids must comply with Prevailing Wage and Apprenticeship Requirements (PWAR) tied to full value ITC and PTC credits provided under the Inflation Reduction Act				
Minimum PPA/PSA 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)	10, 20, or 30, with recognition that timing and term length may change to serve supplemental role to I&M's portfolio
ROFR and Buyout Option	Yes				
Products	Bundled renewable energy product. Energy, Capacity, Ancillary Services, Environmental Attributes, optional Storage		Energy, Capacity, Ancillary Services, optional Storage	Energy, Capacity, Ancillary Services	Energy, Capacity, Ancillary Services, Environmental Attributes, optional Storage
PPA Price Structure	Fixed price / Non-Escalating All-in around-the-clock price		Tolling Agreement with Firm Fuel Supply Agreement	Technology Dependent	

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Evaluation Criteria

Eligibility & Threshold Review

- Base Proposal is for PSA or PPA
- COD no later than 12/15/2027
- Minimum Size of 5 MWac
- Located in IN, MI, IL, or OH for wind; IN or MI for solar, gas, storage, and other capacity resources.
- For projects in development
 - Bidder must have at least 1) except for Rockport re-use, a queue position of AG1 (or earlier) and a completed PJM System Impact Study which remains active in the PJM queue, 2) a completed MISO Final DPP SIS and Network Upgrade Facilities Study and Firm Transmission from the Project into PJM, or 3) a completed I&M Distribution Impact Study
 - Bidder must have established Site Control
 - Bidder or its affiliates shall 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 equal to or greater than the Bidder's proposed Project and/or have demonstrated appropriate experience.
- For existing assets
 - Bidder must have full ownership of the asset, or have documented authority to offer the asset into the RFP
 - Asset must have a minimum of 10 years of remaining operational life based on initial design standards to participate in the RFP
- Union labor preferred; non-thermal bids must comply with Prevailing Wage and Apprenticeship Requirements (PWAR) tied to full value ITC and PTC credits provided under the Inflation Reduction Act

Evaluation Criteria

Eligibility & Threshold Review

- Technology
 - Wind (GE, Vestas, Siemens); must include cold-weather package
 - Solar (Approved Panels/Inverters)
 - Other (proven technology and commercial feasibility)
- Resource Information: Bidder must submit all required Resource Studies / Information requested in the appendices for the proposed resource type (e.g., independent wind report for Wind)
- Minimum Design Life - 30 year for wind, solar, and gas; 20 year for storage; for other resources minimum 15 year, prefer 30 year (technology dependent)
- Developer experience and financial backing
- Minimum Credit Requirements:
 - Bidder is required to include financial information requested in the appendices to assist with AEP credit assessment
 - Bidder must verify receipt of AEP's minimum credit package requirements guidelines provided upon receipt of a completed Non-Disclosure Agreement
 - Bidders are required to verify that any costs associated with meeting the credit requirements are included in the submitted bid price
- Exceptions to form PSA or PPA (including ROFR/Buyout)
- Exceptions to AEP Facility Standards and Scope of Work

Evaluation Criteria

Price Criteria – 60%

Proposals will be evaluated using multiple Price Metrics to best capture the costs and value streams relevant to different Resource Types

	Price Metric	Calculation	Scoring Metric ¹
Phase 1	Levelized Adjusted Cost of Energy (LACOE)	$\frac{\text{PV Total Cost}}{\text{PV Expected Lifetime Energy Output (MWh)}}$	First Composite Score for Wind and Solar
	Levelized Adjusted Cost of Capacity (LACOC)	$\frac{\text{PV Total Cost}}{\text{PV Installed Capacity Value (MW)}}$	First Composite Score for Supplemental Capacity Resources
Phase 2	Value to Cost Ratio	$\frac{\text{PV Total Value}}{\text{PV Total Cost}}$	Second Composite Score across all Resource Types

1. Scoring Metrics are evaluated on a curve that is set by the highest ranking Proposal in a particular category. The highest ranking Proposal will score the maximum 60 points. The remaining 40 points of the 100 point Composite Score are derived from the Non-Price Evaluation metrics.

Evaluation Criteria

Non-Price Criteria – 40%

- A total of ten non-price factors will be considered in the evaluation process for each proposal.
- The ten non-price factors are further grouped into four categories

Category	Factors
Proposal/Project Quality	<ul style="list-style-type: none">• Bidder Experience and Financial Wherewithal• Exceptions to AEP Generation Facility Design Standards• Exceptions to Form PSA or PPA
Asset-Specific Benefits and Risks	<ul style="list-style-type: none">• Contract Term/Asset Life-Related Market Risks• Resource Optionality and Flexibility Benefits
Development Status / Risks	<ul style="list-style-type: none">• Development Status, Interconnection Status, and Other Project Completion Risks• Project Timing
Environmental, Social, and Economic Impacts/Benefits	<ul style="list-style-type: none">• Carbon Emissions Goals• Environmental and Wildlife Impact / Permitting• Indiana and Michigan Economic Stimulus Benefits, Community Support, Supplier/Contractor Diversity, Environmental & Social Justice

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RFP Development Process and Timeline

Development Process

- Review RFP plan with stakeholders
- Develop the draft RFP for release
- Receive feedback from stakeholders via the IM
- Update the draft RFP based on feedback received
- Release RFP

Schedule

Task	Completion Date
RFP Development Meeting	February 10, 2023 (10:30 am EST)
Draft RFP Released	February 17, 2023
Pre-RFP Stakeholder Meeting	March 1, 2023 (1:00 pm EST)
Comments Due	March 10, 2023
Issue RFP	March 31, 2023
Proposals Received	May 26, 2023
Eligibility and Threshold Review	June 14, 2023
Recommended Shortlist	September 1, 2023

Note: I&M's decisions regarding the results of the RFP will be subject to the receipt of regulatory approvals from the Indiana Utility Regulatory Commission and the Michigan Public Service Commission.

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Stakeholder Feedback Process

- CRA is actively soliciting feedback from customer groups and potential participants. To this end, CRA has established a dedicated e-mail to receive comments from stakeholders
- Stakeholders should direct any questions, concerns, suggestions, or comments for consideration and potential inclusion in the upcoming RFP directly to CRA via this e-mail address.
- CRA will share only the core content of the communication and not any identifying information with respect to the sender either with I&M or other parties unless otherwise compelled to do so by law.

Website

<https://www.IMAllSourceRFP.com>

Email

IMAllSourceRFP@CRAI.com

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- **Note:** If you wish to remain anonymous, please send us an e-mail. By speaking on the Teams webinar, your name will be visible to all participants.

To ensure all participants have an equal opportunity to submit their question, participants will be limited to one question and a follow up question if there are other questions in the queue.

- If time permits, you may pose additional questions.