

PRE- PROPOSAL CONFERENCE

REQUEST FOR INFORMATION (RFI)

ENERGY TECHNOLOGY IMPLEMENTATION (POWER GENERATION AND RESILIENCY STRATEGY)

HOUSTON AIRPORT SYSTEMS

SOLICITATION NO.: HJA-RFIPGR-2023-021

Keith Reihl
Sr PM Sustainability
Houston Airport System

Barry Gardebled
PD Major Projects
Houston Airport System

Jorge M. Ardines
Sr. Procurement Specialist
Houston Airport System

Thursday, May 4, 2023, 10:00 A.M. (CST)
Infrastructure Division Office - Auditorium.
111 Sandifer St., Humble, TX 77338

Pre-Qualification Meeting Agenda



- I. Solicitation Overview
Barry Gardebled
Sr. PM Major Projects
- II. Project Scope and Overview
Keith Reihl
Sr. PM Sustainability
- III. Questions/Answers/Site Visit

PURPOSE:

Houston Airport Systems (HAS) is choosing a pro-active approach to meeting its future energy needs. The success of George Bush Intercontinental Airport (IAH) is improved with more resilient, clean, and affordable energy to meet IAH electricity and thermal energy needs. HAS currently pays about 5 cents a kWh so any solution should be within this price range. This RFI is the first step in a process that HAS will follow in the development of its energy future for IAH.

Solicitation Overview



Respondent shall submit the RFI Proposal.

PROPOSAL.SOLICITATION DUE DATE AND TIME:

Sunday, August 27, 2023, 2:00 P.M. (CST)

QUESTIONS AND REQUESTS FOR ADDITIONAL INFORMATION ARE DUE BY:

Thursday, July 22, 2023, 2:00 P.M. (CST)

Must be received electronically and directed via email to:

jorge.ardines@houstontx.gov

LETTER OF CLARIFICATION(s):

Responses to questions received from Firm(s) and any changes to the scope shall be confirmed in writing and will be issued directly to the designated and authorized contact person(s) for each firm via email prior to submittal due date.

Submittal Procedures



Submit 2 digital copies on memory sticks (USB drive – one on each memory stick), labeled with the appropriate RFI name and number that includes a complete copy of all information, submitted in a sealed envelope to:

Attn: Cathy Vander Plaats
Aviation Procurement Officer
Supply Chain Management
18600 Lee Road
Humble, Texas 77338

no later than Sunday, August 27, 2023, 2:00 P.M., (CST).

HAS desires to minimize the submission of unnecessary RFI material. Please include the RFI identification number **HJA-RFIPGR-2023-021** on any submissions.

The envelope or package should clearly identify the name and address of the Respondent and indicate the contents to be: “Response to HJA-RFIPGR-2023-021: RFI – IAH Power Generation & Resiliency Strategy”.

Technical Proposal Submittal Requirements



SUBMISSION FORMAT

Houston Airport System's review committee will review the submissions based on the following criteria. Please be advised that the information received may be utilized in a forthcoming RFQ/P. For the response to this RFI, please copy the outline as provided herein and insert your response below each item.

A. Business Viability and Capability (Recommend maximum 6 Pages including graphics, etc.)

1. Corporate name.
2. DBA name if different from 1.
3. State of incorporation in the United States (or elsewhere).
4. Location of corporate headquarters.
5. Is the Company legally qualified to do business with the City of Houston, and within the State of Texas, and conduct all aspects of the subject project as required by Texas State and Federal law.
6. Explain the organizational chart that the Company will use to provide each of the required DBFOM activities (Design–Build-Finance-Operate-Maintain)?
7. Geographic coverage of business activities.

SUBMISSION FORMAT

- B. Does your company or team have the operational expertise and field experience to assure the ongoing integrity and performance of this Project, year after year? Services (Recommend maximum 25 Pages including graphics, etc.)**
1. Describe the Company's mission, vision, and core competencies.
 2. Describe whether and how the Project and the DBFOM and EaaS business models fit into your traditional scope of competitive service offerings.
 3. Describe why the Project is of interest to your company.
 4. Would your company propose to deliver the Project as a prime, as a form of joint venture or as a member of a consortium?
 - a. If not the prime, in what role would you foresee your company participating?
 - b. Why and how are you qualified to perform in the anticipated Project capacity?

Technical Proposal Submittal Requirements



SUBMISSION FORMAT

C. Energy Initiatives Project Approach (Recommend maximum 25 Pages including graphics, etc.)

1. Explain your vision for the Project.
2. Identify your Company's planned approach and delivery method that meet HAS's stated objectives?
3. Energy as a Service (or PPA) financing model is suggested for providing revenue to the DBFOM firm. What other funding options and incentives, grants, rebates, etc. should HAS consider that avoids a capital investment or encumbrance by HAS while allowing for off balance sheet funding and will take advantage of provisions of Inflation Reduction Act or other incentives?
4. The delivery model for the Project is envisioned to have the Prime contractor provide services to design, build, finance, operate and maintain (DBFOM). What other iterations of this delivery model should be considered that will provide all of these services while spreading performance risks fairly to all participants? You are also free to suggest alternative delivery approaches.
5. Which delivery approach(s) would your Company be able to offer for the Project?

SUBMISSION FORMAT

- C. Energy Initiatives Project Approach (Recommend maximum 25 Pages including graphics, etc.) (Continued)**
6. HAS's objective is to secure clean, resilient, and affordable energy over a fixed long term contractual period. What technical approaches (Energy Resource Measures) do you recommend for meeting the demand requirements set forth in the Energy Timeline (Exhibit B)?
 7. Given that HAS wants to diversify its fuel mix and reduce dependence on any one or two energy resources, what do you recommend for optimal fuel mix?
 8. Given that HAS is considering a long term contract for the Project, what do you recommend to maintain flexibility and scalability over the long term?
 9. What is your company's approach for providing design services for the new ERM's within this Project?
 10. What is your company's approach for providing building and construction services for the new ERM's within this Project?
 11. What is your Company's approach for providing financing and cost recovery for the ERM's envisioned with this Project?

SUBMISSION FORMAT

C. Energy Initiatives Project Approach (Recommend maximum 25 Pages including graphics, etc.) (Continued)

12. Explain resources for staffing, monitoring, operations, and repairs. What is your Company's approach for providing financing and cost recovery for the ERM's envisioned with this Project?
13. Describe your expectations regarding the schedule for design and construction.
14. What do you recommend for the term of the EaaS agreement?
15. What are the major issues and challenges that your Company perceives with the Project? (Please address all risks that your Company foresees; (examples: emissions permitting, utility interconnections, meter aggregation, competitive pricing for energy, development and implementation schedule, technology uncertainty, others, etc.)

Technical Proposal Submittal Requirements



SUBMISSION FORMAT

D. Additional Information (Maximum: 20 Pages)

1. Please provide any other information or details you believe pertinent to the successful delivery and ongoing operations of the Project.
2. Describe any lessons learned from similar projects which would be beneficial in consideration of delivery of this project.
3. Any individual project profile should be limited to one page in length for each project.


Questions

- To be official, questions must be in writing and submitted via email to jorge.ardines@houstontx.gov
- Please include the phrase **“Response to HJA-RFIPGR-2023-021: RFI – IAH Power Generation & Resiliency Strategy”**
- Answers will be distributed via email to the designated and authorized person(s) for each firm as Letter of Clarification(s):
<http://www.fly2houston.com>

- 1. Provide 50 MW of energy production scalable to 100 MW**
Solar, wind, cogen and other technologies can be used alone or as a combination. Green, no and low carbon technologies are preferred.
- 2. Energy Storage**
Batteries, gravity, hydrogen production and other technologies can be used alone or as a combination.
- 3. Connection to loads**
Provide a plan to connect energy production to current and future loads.

IAH



 Existing
Centerpoint
substation

Future Loads



IAH Electric Demand Growth (MW) - 2023 to 2030

Area of Growth	2023 Base Year	2024	2025	2026	2027	2028	2029	2030	Growth Only
Expansions of Central Terminal Areas:									
Terminal A: Renovation and Expansion					1.5	1.5			3
Terminal B: Two new North Concourses (5 MW each)				5	5.0				10
Terminal C, D and E Renovation								1.0	1
Electric Vehicles - Airport Fleet									
Three fire stations EV Chargers and support equipment						0.0			0
HAS Fleet		0.3	0.3	0.3	0.3	0.3	0.3	0.3	2
Electric Transportation									
Electric Vehicles (EV) - Rental Agencies			1.3	1.3	1.3	1.3			5
EV - Customer Parking - Level Two (10% of 32,000 spaces)			1	1	1	1	1	1	6
EV - Two Rapid Charger Power Stations (4.5 MW each)						9			9
Fifteen (15) Electric Vertical Take Off And Landing Aircraft (1 MW ea.)				1	1	1	1	1	5
Three (3) Electric Airplanes(1 MW ea.)								3	3
Electric Trains (growth)				0				0	0
MW - Growth	35	0	3	9	10	14	2	6	44
Diversification Factor		80%	80%	80%	80%	80%	80%	80%	80%
Diversified Demand	35	35	37	44	52	63	65	70	35

Project Site Visit



Site Visit Coordinator: Keith Reihl, Sr. PM Sustainability

A site visit will take place immediately after the pre-submittal conference completion. This site visit is the only opportunity for Respondents to see the site before Submittal Due Date. **Board bus at IDO which will return to the IDO after the tour.**

IAH

1. Meet at IDO Auditorium
2. Tour perimeter of IAH driving Lee rd S, Greens Rd W, Aldine N, Farrell, 1960 E then Lee south. Point out substations along the way and discuss property.
3. Tour Terminal Alley pointing out electrical services and then to CUP.
4. Go to admin then back to RAC QTA on south side and back to IDO for questions.

★ Existing Centerpoint substation



Closing Remarks



**POWER GENERATION & RESILIENCY STRATEGY
RFI NO.: HJA-RFIPGR-2023-021**

HOUSTON AIRPORT SYSTEM

Thank you!

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jorge.ardines@houstontx.gov**

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