

## DE-FOA-0002373 - REFUEL+IT

Questions can be sent to ARPA-E-CO@hq.doe.gov

FIRST DEADLINE FOR QUESTIONS TO ARPA-E-CO@HQ.DOE.GOV: 5 PM ET, DECEMBER 10, 2020

### **QUESTIONS AND ANSWERS**

PLEASE REFER TO THE GENERAL FAQS SECTION OF ARPA-E'S WEBSITE (https://arpa-e.energy.gov/faqs/general-questions) FOR ANSWERS TO MANY GENERAL QUESTIONS ABOUT ARPA-E AND ARPA-E'S FUNDING OPPORTUNITY ANNOUNCEMENTS. ADDITIONAL QUESTIONS SPECIFIC TO THIS FOA ONLY ARE INCLUDED BELOW. PLEASE REVIEW ALL EXISTING GENERAL FAQS AND FOA-SPECIFIC QUESTIONS BEFORE SUBMITTING NEW QUESTIONS TO ARPA-E.

I. Full Application Phase Questions:

Q1. We respectfully request that the due date of this solicitation extended by one week. The allocated time for proposal preparation of 45 days is typical for DOE proposals. However, this particular 45 day window includes 13 days of holidays and holiday weekends over three holiday time periods: Thanksgiving, Christmas, and New Year's day. While the Thanksgiving weekend is four days, some companies on our team are closed for a winter holiday period between December 24 and January 1. It is very challenging for us to put together a quality proposal without forcing people to take time away from their families and give up their traditional paid holiday time to develop the proposal. As a result, we request a one week extension.

**ANSWER:** ARPA-E has revised the date for submission of applications to January 11, 2020. The time for submission of applications remains unchanged at 9:30 am Eastern Time.

Q2. Will ARPA-E consider (and/or equivalently welcome) as eligible, high energy density carbon-neutral liquid fuels (e.g. methanol or formic acid) other than ammonia, as long as all other FOA requirements are achieved? ...

ANSWER: No. As set forth at FOA Section I.C:

ARPA-E is initiating the REFUEL Integration and Testing program (REFUEL+IT), which will support the integration of technologies for the synthesis and use of ammonia developed under ARPA-E awards and elsewhere into a skid-mounted ammonia synthesis system powered by an intermittent renewable energy source at a production scale of 1 metric ton of ammonia per day.

Q3. If selected for award, what are the requirements for use of Foreign Nationals (FN), as prime recipient and/or subrecipient, during the performance of the subsequent award?

**ANSWER**: Eligibility of foreign entities to participate in this FOA as prospective prime or sub-recipients is discussed at its Section III.A.3.

Applicants are responsible for personnel staffing decisions concerning their proposal, including for foreign researchers working on ARPA-E awards. Principal Investigators and other researchers are not necessarily required to be U.S. citizens or permanent residents. Hiring/work assignment decisions for ARPA-E research should consider that ARPA-E awards normally involve technology or software - including any manufacturing know-how - that is "restricted or proprietary" as cited in export control regulations (at 15 C.F.R Section 734.8(a)). This includes when a university awardee partners with/licenses to a for-profit team entity, or if the university awardee seeks ARPA-E approval of "protected data" resulting from the research. Also, awardees' inventions resulting from ARPA-E research must be reported and protected, and are subject to U.S. manufacturing requirements. Refer to



# DE-FOA-0002373 - REFUEL+IT

Questions can be sent to ARPA-E-CO@hq.doe.gov

FIRST DEADLINE FOR QUESTIONS TO ARPA-E-CO@HQ.DOE.GOV: 5 PM ET, DECEMBER 10, 2020

### **QUESTIONS AND ANSWERS**

Attachment 1, Clauses 4 and 12, and Attachment 2 of the ARPA-E Model Cooperative Agreement for awardee immigration and export control obligations.

Q4. In regard to REFUEL INTEGRATION AND TESTING PROGRAM (REFUEL + IT) DE-FOA-0002373, is there an interest in technologies designed to separate hydrogen and nitrogen? The purpose would be the point of use purification of H2 after NH3 is generated, transported and then reformed into N2 and H2.

**ANSWER**: This technology could be included only as part of a full integration proposal which provides for the synthesis and use of ammonia as described in the FOA.

Q5. Are Cost Share Commitment Letters required as part of the full proposal submission, or only required upon award negotiations?

ANSWER: Referring to FOA Section VI.B.3: Upon selection for award negotiations ....

Q6.1 The Technical Volume Template provides suggested page limits for the Cover page & Executive Summary (1 page each = 2 pages) in addition to Sections 1-5 that add up to 29 pages (as opposed to the 25 pages stated in the template) for an overall 31 pages. Please confirm the page count is accurate at 31 overall pages for the Cover, Executive Summary & Sections 1-5.

**ANSWER:** Sections 1-5 should not exceed 25 pages. The recommended page amounts are provided as a guideline for the maximum length each section should be, but the total number of pages for Sections 1-5 should not exceed 25 pages, exclusive of the Cover Page and Executive Summary.

Q6.2 The IP Management Plan template includes links for the Data Management Plan options that is to be included as part of the IP Management Plan, but the links do not work. Please provide an updated DMP template link.

**ANSWER**: Management Plan template documents can be found on the ARPA-E website at the following address: <a href="https://arpa-e.energy.gov/technologies/project-guidance/post-award-guidance/project-management-reporting-requirements">https://arpa-e.energy.gov/technologies/project-guidance/post-award-guidance/project-management-reporting-requirements</a>

Q7.1 Is there a minimum Lead Organization Percent Effort percentage requirement for a compliant submission to DE-FOA-0002373 when the Lead Organization is considered a small business?

**ANSWER:** No, however the qualifications, experience and capabilities of the proposed Project Team, and the sufficiency of the proposed Management Plan are considered in the Merit Review of all applications.



## DE-FOA-0002373 - REFUEL+IT

Questions can be sent to ARPA-E-CO@hq.doe.gov

FIRST DEADLINE FOR QUESTIONS TO ARPA-E-CO@HQ.DOE.GOV: 5 PM ET, DECEMBER 10, 2020

#### **QUESTIONS AND ANSWERS**

Q7.2 Is there a requirement that the ammonia synthesis technologies described in the submission be a direct recipient of previous REFUEL funding? "Downsizing of commercial Haber-Bosch process and its integration with renewable energy sources" is specifically mentioned as a submission not of interest but what about novel ammonia synthesis technologies that are neither commercially available nor originally part of REFUEL?

ANSWER: As set forth at FOA Section I.C:

ARPA-E is initiating the REFUEL Integration and Testing program (REFUEL+IT), which will support the integration of technologies for the synthesis and use of ammonia developed under ARPA-E awards and elsewhere (emphasis added) into a skid-mounted ammonia synthesis system powered by an intermittent renewable energy source at a production scale of 1 metric ton of ammonia per day.

Q7.3 Can the core technology of this proposal relate to other aspects of ammonia synthesis such as hydrogen production?

ANSWER: Refer to REFUEL+IT FAQ 4.

Q7.4 Must all of the partnerships between the Prime Recipients and Subrecipients be established before submission of the full proposal to be considered compliant?

**ANSWER:** Compliance criteria are given at FOA Section III.C.1. The qualifications, experience and capabilities of the proposed Project Team, and the sufficiency of the proposed Management Plan are considered in the Merit Review of all applications.

Q7.5 Can equipment, land and below-market 100%-renewable power production be counted toward cost-share requirements?

**ANSWER**: The acceptability of proposed cost sharing or matching requires a fact-based determination that will be accomplished if a Full Application is selected for award negotiations. Federal regulations governing cost sharing or matching can be found at 2 C.F.R. § 200.306.