

QUESTIONS AND ANSWERS

PLEASE REFER TO THE GENERAL FAQs SECTION OF ARPA-E'S WEBSITE ([HTTP://ARPA-E.ENERGY.GOV/?Q=FAQ/GENERAL-QUESTIONS](http://arpa-e.energy.gov/?q=faq/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. Concept Paper Phase Questions:

Q1. I AM CHECKING TO SEE IF A SMALL BUSINESS TRADING IN STRATEGIC METALS IS ELIGIBLE FOR THIS GRANT IN ORDER TO FURTHER DEVELOP THE SCOPE OF A VETERAN OWNED, DISADVANTAGED, VETERAN OWNED, 8(A), DISADVANTAGED GEOGRAPHICAL HUBZONE SMALL BUSINESS DEVELOPMENT, EXPANSION, AND MARKETING IN ORDER TO BETTER SUPPLY STRATEGIC METALS TO THE U.S. ARMED FORCES, THE DLA FOR STOCKPILE AND OTHER PURPOSES IN AEROSPACE CONTRACTING.

PLEASE ADVISE AT YOUR EARLIEST, AS WE ARE LOOKING TO EXPAND THIS AREA OF BUSINESS.

ANSWER: Refer to Section III.A. of the FOA for eligibility criteria.

Q2. MY NAME IS ---REDACTED--- AND I AM THE PRINCIPAL INVESTIGATOR FOR ---REDACTED--- ARPA-E ---REDACTED--- PROJECT ---REDACTED---.

WE ARE LOOKING AT THE SCALEUP 2023 FOA AND HAVE SOME QUESTIONS RELATED TO OUR ---REDACTED--- PROJECT AND DISCLOSURE OF SUBJECT INVENTIONS.

PER ATTACHMENT 2 OF OUR CONTRACT AGREEMENT WITH ARPA-E, WE ARE REQUIRED TO DISCLOSE EACH SUBJECT INVENTION TO ARPA-E IN THE FORM OF A WRITTEN REPORT WHICH "SHALL BE SUFFICIENTLY COMPLETE IN TECHNICAL DETAIL TO CONVEY A CLEAR UNDERSTANDING TO THE EXTENT KNOWN AT THE TIME OF THE DISCLOSE, OF THE NATURE, PURPOSE, OPERATION, AND THE PHYSICAL, CHEMICAL, BIOLOGICAL OR ELECTRICAL CHARACTERISTICS OF THE INVENTION."

WE ARE MAKING SUBSTANTIAL PROGRESS ON THE EQUIPMENT DESIGN SCOPE, AND ARE AIMING TO GET DOCUMENTATION OF THE DESIGN TOGETHER IN TIME TO SUPPORT A SCALEUP 2023 CONCEPT PAPER SUBMISSION BY THE JULY 21 DEADLINE. IS THERE ANY ADDITIONAL INFORMATION OR EXPECTATIONS FROM ARPA-E IN TERMS OF THE WRITTEN REPORT, CONSIDERING WHERE WE ARE IN THE PROCESS OF OUR ---REDACTED--- PROJECT? HOW LONG SHOULD THE REPORT BE? CAN WE (OR SHOULD WE) SUPPLEMENT AT A LATER DATE WITH ADDITIONAL INFORMATION AS THE DESIGN DEVELOPS?

WE HAVE SUBMITTED REGISTRATION FOR OUR COMPANY ON IEDISON AND ARE WAITING FOR APPROVAL BEFORE WE CAN EXPLORE THE SUBMISSION REQUIREMENTS ON THE WEBSITE. ANY INFORMATION YOU CAN PROVIDE IN THE INTERIM WOULD BE GREATLY APPRECIATED AND WILL HELP US TO ENSURE WE CAN SUBMIT A PROPER APPLICATION FOR SCALEUP 2023.

ANSWER: Submit as complete a description as you can at this time to iEdison. When you file your initial disclosure you may add a note to the invention record that you intend to submit and upload a new file, an amended invention disclosure, at a later date. If you submit and upload an amended invention disclosure add a note to the invention record explaining why there is a new invention disclosure uploaded.

Q3. WHEN WRITING A PROPOSAL

AS PER THE INFORMATION ON PAGE 14

APPLICANTS SHOULD PROVIDE SUFFICIENT EVIDENCE TO PROVE THE TECHNICAL VIABILITY OF THEIR PROPOSED TECHNOLOGY AND PROJECT. APPLICANTS ARE ENCOURAGED TO SUBMIT PROOF-OF-CONCEPT TEST DATA THAT SUPPORTS THE PROBABILITY OF SUCCESS OF THE PROPOSED PROJECT.

WHAT TYPES OF EVIDENCE AND TEST DATA DO I NEED TO PROVIDE?

ANSWER: Applicants should follow the content requirements specified in the Concept Paper Template in conjunction with the criteria listed in Section V.A.1 of the FOA.

Q4. REGARDING THE SCALEUP 2023 PROGRAM, I WONDER IF OUR COMPANY, ---REDACTED--- CAN APPLY OR IF WE HAVE TO HAVE PREVIOUS/ONGOING FUNDING FROM ARPA-E FIRST TO GET A SCALEUP PROGRAM? WOULD WE NEED TO HAVE AN SBIR OR SEED PROGRAM WITH ARPA-E TO BE ELIGIBLE FOR SCALEUP?

ANSWER: The eligibility requirements for this FOA are discussed in Section III.A. of the FOA. As stated there:

Only organizations seeking to scale subject inventions created during an earlier ARPA-E award and reported in the iEdison system are eligible for funding under this program. Organizations may also leverage software, developed and reported (in technical reports or otherwise) under an ARPA-E award, that will be used in manufacturing, as “firmware” in manufactured products, or deployed on energy infrastructure or energy systems. For both subject inventions and software, note that “ARPA-E seeks Applications for projects that...validate scalability, reliability, and domestic manufacturability” (quoting from Section II.A of the FOA), and Applicants are required to agree to the U.S. Competitiveness Provision requirements detailed in Section V.E.7 of the FOA as part of an award under this FOA.

SCALEUP Applicants are not required to have participated within the original ARPA-E award – alternatively, Applicants may have licensed or purchased rights in such subject inventions or software and thereby become eligible for SCALEUP 2023.

Q5. CAN APPLICANTS PURSUING A TECHNOLOGY LICENSE TO SUBJECT INVENTIONS THAT WERE DEVELOPED WITH ARPA-E FUNDING APPLY TO SCALEUP2023 WITH AN OPTION AGREEMENT?

ANSWER: Yes. A legally binding option agreement to license the qualifying subject invention or software that becomes effective according to pre-negotiated terms between licensor and licensee upon the issuance of the SCALEUP award to the Applicant would be sufficient. Refer to Section III.D of the FOA for Responsive Criteria.

ARPA-E performs a preliminary technical review of Concept Papers and Full Applications. The following types of submissions may be deemed nonresponsive and may not be reviewed or considered:

Submissions that fail to adequately prove ownership or licensing of the intellectual property necessary to accomplish the proposed project.

Q6. I WOULD LIKE TO KNOW IF TECHNOLOGIES THAT HAVE RECEIVED PREVIOUS FUNDING FROM THE U.S. DEPARTMENT OF ENERGY (BUT NOT DIRECTLY FROM ARPA-E) ARE ELIGIBLE TO APPLY FOR FUNDING OPPORTUNITY NO. DE-FOA-0003100? THE FOA IS AN EXCELLENT FIT FOR A BATTERY CONTROL AND DISPATCH SOFTWARE TECHNOLOGY THAT ADDRESSES KEY BARRIERS TO SCALING ENERGY STORAGE IN EXISTING POWER MARKETS.

ANSWER: No, only concepts based on ARPA-E subject inventions are eligible. Please refer to Section III.A. of the FOA.



Q7. I AM BUILDING WORLD'S HIGHEST CAPACITY LI-ION BATTERIES IN THE USA FOR DEFENSE, AEROSPACE AND INDUSTRIAL APPLICATIONS IN ADDITION TO EV. I ALREADY HAVE THE PROTOTYPES READY AND WORKING WITH SEVERAL GOVT AND COMMERCIAL CUSTOMERS.

I AM INTERESTED IN APPLYING TO THE SCALE UP 2023 PROGRAM. MY COMPANY WAS FOUNDED EARLIER THIS YEAR AND SO I HAVEN'T RECEIVED ANY PREVIOUS ARPA AWARDS. CAN I STILL APPLY OR I AM INELIGIBLE?

ANSWER: See FAQ 4.

Q8. CAN APPLICANTS PURSUING A TECHNOLOGY LICENSE UNDER A SIGNED OPTION AGREEMENT TO SUBJECT INVENTIONS THAT WERE DEVELOPED WITH ARPA-E FUNDING APPLY TO SCALEUP2023?

ANSWER: Please refer to FAQ 5.

**Q9. QUESTION IS THIS OPEN TO ---REDACTED---
I DON'T BELIEVE WE WERE INVOLVED IN THE LAST ARPA-E FUNDING**

ANSWER: See FAQ 4.

Q10. WE ARE A DOE AWARD RECIPIENT FOR A SBIR PHASE II (\$1.650 M). JUST WONDERING IF SUCH AN AWARD WOULD QUALIFY US FOR THIS ARPA-E SCALUP FUNDING OPPORTUNITY. KINDLY COMMENT.

ANSWER: See FAQ 4.

Q11. I'M REACHING OUT WITH A QUESTION FOR THE SCALEUP 2023 FUNDING UNDER DE-FOA-0003100 SOLICITATION. IT SEEMS THAT THE PRE-REQUISITE TO APPLY FOR THIS PROGRAM IS THAT THE COMPANY BE ALREADY PREVIOUSLY FUNDED THROUGH ARPA-E. IS THIS CORRECT? SINCE OUR COMPANY HAS NEVER HAD A CONTRACT WITH DOE, ARPA-E, WE INELIGIBLE TO APPLY IF I'M READING THIS CORRECTLY.

ANSWER: No, Please refer to FAQ 4

Q12. TO QUALIFY FOR SCALEUP, APPLICANTS MUST HAVE FUNDING FROM ARPA-E ONLY — NOT FROM DOE, AS IN DOE SBIR/STTR? CAN AN APPLICANT QUALIFY TO APPLY BY HAVING PROJECT FUNDING AS A COMPANY PARTICIPANT IN AN ARPA-E I-CORPS COURSE?

ANSWER: Yes, only concepts based on ARPA-E subject inventions are eligible. Please refer to FAQ 4.

Q13. 1.THE SOLICITATION STATES THAT DOE LABORATORIES ARE NOT ALLOWED TO APPLY FOR SCALE UP, WHAT ABOUT ORGANIZATIONS FUNDED BY DOD?

2. DO PATENTS NEED TO BE ISSUED BY THE TIME OF AWARD? THERE IS A PATENT PENDING, WHICH MAY BE ISSUED BEFORE THE FALL.

ANSWER: 1. Federally funded research and development centers (FFRDCs) and labs can participate as Project Team Members and Consortia Members but not as Standalone Applicants or Leads of Project Teams.

The eligibility criteria including lab participation is discussed in Section III. A of the FOA. As stated there: ARPA-E welcomes the participation of educational institutions and FFRDCs/DOE Labs, as Project Team Members and Consortia Members, but not as Standalone Applicants or Leads of Project Teams. This is in light of this FOA's goal of rapidly advancing the commercialization of energy technologies resulting from ARPA-E funding. Commercialization of such inventions of educational institutions and FFRDCs/Labs should be accomplished through for-profit businesses. Such businesses should have the incentive, ability, and organizational competencies to attract financial support during the project, such as the 20%-33.3% cost share, as well as additional private capital, particularly after a successful SCALEUP project. Educational institutions and FFRDCs/Labs are encouraged to participate as Project Team Members and Consortia Members in the proposals of businesses who license their – or others' - inventions arising from ARPA-E-funded research.

2. Per the FOA Section III.A, organizations seeking to scale subject inventions created during an ARPA-E award and reported in the iEdison system are eligible for funding under SCALEUP 2023; no patent is required, but it is permissible to cite patents that result from the subject invention(s) specified in the Concept Paper.

Q14. I HAVE A FEW QUESTIONS REGARDING THE SCALEUP 2023 FOA:

- 1) CAN THE PROPOSED TEAM CHANGE BETWEEN THE CONCEPT PAPER AND FULL PROPOSAL?**
- 2) IF THE LEAD APPLICANT IS LICENSING QUALIFYING IP FROM ANOTHER PARTY, DOES A LEGALLY BINDING AGREEMENT NEED TO BE IN PLACE PRIOR TO THE FULL PROPOSAL OR IS A NON-LEGALLY BINDING LOI SUFFICIENT?**
- 3) IS A TEAM ELIGIBLE TO APPLY IF THE LEAD APPLICANT DOES NOT HOLD ANY QUALIFYING IP BUT ANOTHER TEAM MEMBER DOES?**

ANSWER: 1) Applicants may modify the Project Team for their Full Applications.

2) SCALEUP Applicants are not required to have participated within the original ARPA-E award – alternatively, Applicants may have licensed or purchased rights in such subject inventions or software and thereby become eligible for SCALEUP 2023. This FOA is open to the following Applicants that propose to scale subject inventions or software that have resulted from ARPA-E awards: i) Current and former ARPA-E awardees (except Institutions of Higher Education⁷ and FFRDCs/DOE Labs) that own/control subject invention(s) or software arising from their ARPA-E award(s); ii) Entities that are licensees of subject invention(s) or software arising from any ARPA[1]E award(s);...” A legally binding agreement must be in place prior to full proposal, but such an agreement does not have to be in place before submission of a Concept Paper. A Letter of Intent that is not legally binding is not sufficient. The legally binding

agreement may be an option to license the qualifying subject invention or software that becomes effective according to pre-negotiated terms between licensor and licensee upon the issuance of the SCALEUP award to the Applicant.

3) The Applicant must either own/control the qualifying IP or be licensed to the qualifying IP at the time the full application is submitted.

Q15. IS AN LOI WITH A COMMERCIAL PARTNER REQUIRED FOR THE CONCEPT PAPER SUBMISSION?

ANSWER: No, A Letter of Intent is not required for the Concept Paper submission. As noted in Section IV. D.4 of the FOA, a letter of Intent at least one Commercialization Partner is required for the Full Application .

Q16. FOR THE SCALEUP PROGRAM, IS THERE ANY RULE PROHIBITING A COMMERCIALIZATION PARTNER FROM RECEIVING FUNDS FROM THE PRIME APPLICANT?

THERE IS MENTION OF OPTIONAL COST SHARE PROVIDED BY THE COMMERCIALIZATION PARTNER, BUT I DO NOT SEE ANY RULES REGARDING THE COMMERCIALIZATION PARTNER BEING SUPPORTED BY THE PRIME APPLICANT EITHER THROUGH THE APPLICANT'S AVAILABLE FUNDS OR FUNDS RECEIVED AS A RESULT OF THE AWARD.

ANSWER: The applicant has full discretion over the use of their private funds with their commercialization partners. If the commercialization partner will be a subrecipient on the SCALEUP award and receiving federal funds, the prime applicant will be required to flow down administrative and national policy requirements to the subrecipient.

Q17. REGARDING THE BELOW OPPORTUNITY, YOU WILL ONLY OFFER GRANTS TO CANDIDATES WHO HAVE ALREADY RECEIVED GRANTS, CORRECT (BELOW)? YOU WON'T CONSIDER A VERY UNIQUE SOLAR TECH OPPORTUNITY FROM A LEGALLY DISABLED PERSON? IS THAT CORRECT?

ANSWER: See FAQ 4.

Q18. I HAVE A FEW QUESTIONS RELATING TO THE SCALE UP 2023 PROGRAM, FOR WHICH I ATTENDED THE WEBINAR TODAY. I WAS PI FOR AN ARPA-E PROGRAM ON LOW POWER CONSUMPTION LASER FOR COMMUNICATIONS AND DATA CENTERS FOR A SMALL COMPANY BY NAME ---REDACTED--- WHICH PROGRAM WAS VERY SUCCESSFUL AND DEVELOPED SOME VERY NEW TECHNOLOGIES. HOWEVER, THE COMPANY WAS ACQUIRED BY A FOREIGN ENTITY AND THEY DID NOT PURSUE THAT FIELD AND DID NOT FILE ANYTHING IN I-EDISON. I, ALONG WITH THE CORE TEAM WHO WORKED ON THE ARPA-E PROGRAM, WE HAVE STARTED A NEW COMPANY (---REDACTED---). MY QUESTION IS. WHETHER WE COULD WRITE A SCALE UP PROPOSAL FROM THE NEW COMPANY WHEN THERE IS NOTHING IN I-EDISON AND IT'S A NEW COMPANY.

ANSWER: The eligibility criteria for this FOA is discussed in Section III. A. As stated there:

Only organizations seeking to scale subject inventions created during an earlier ARPA-E award and reported in the iEdison system are eligible for funding under this program.

As noted in Section III. B. Subject Invention Disclosure of the FOA, If the SCALEUP 2023 Applicant filed an invention report prior to ARPA-E using iEdison and the period of reporting ended prior to the rollout of iEdison in 2016, ARPA-E will accept a DOE S Number for inventions that meet these criteria. The Format for a DOE-S# is "S" + 6 digits (S-#####).

Q19. WE ARE WORKING IN ADVANCED TECHNOLOGIES ON SOLAR CELLS, WE ARE INTERESTED FOR THE SCALEUP PROGRAM OF ARPA-E AS TO SCALE UP THE IMPLEMENTATION OF OUR RESEARCH AND HELPING THE U.S INDUSTRY TO THRIVE. I APPRECIATE IF WE ARE ELIGIBLE TO APPLY AT ARPA-E PROGRAM

ANSWER: See FAQ 4.

Q20. THANK YOU FOR THE WEBINAR ON THE SCALEUP PROGRAM. I WANTED TO FOLLOW UP REGARDING A POINT MENTIONED DURING TODAY'S TALK.

OUR TEAM IS DEVELOPING A CARBON CAPTURE TECHNOLOGY AND WE ARE INTERESTED IN APPLYING TO THE SCALEUP PROGRAM. HOWEVER, WE HAVE NOT BEEN ASSOCIATED WITH ANY PREVIOUS ARPA-E PROGRAMS.

MY UNDERSTANDING IS THAT ONE OF THE KEY REQUIREMENTS IS FOR THE TECHNOLOGY'S INTELLECTUAL PROPERTY (IP) TO HAVE ALREADY BEEN DEVELOPED WITHIN AN ARPA-E PROGRAM. IS MY UNDERSTANDING CORRECT? IF THAT IS THE CASE, I WOULD LIKE TO KNOW HOW WE CAN APPLY TO A PROGRAM THAT QUALIFIES US FOR THE SCALEUP PROGRAM.

ANSWER: The eligibility requirements for this FOA are discussed in Section III.A. of the FOA. As stated there:



SCALEUP Applicants are not required to have participated within the original ARPA-E award – alternatively, Applicants may have licensed or purchased rights in such subject inventions or software and thereby become eligible for SCALEUP 2023.

Refer to the ARPA-E website for Funding Opportunity Announcements that you can apply to.

Q21. I AM HOPING MY COMPANY (---REDACTED---) CAN BE THE PRIME APPLICANT FOR A SCALEUP 2023 PROGRAM. WE WANT TO USE TWO ENTITIES (BOTH A SMALL COMPANY AND GOVERNMENT LAB) THAT HAVE RECEIVED ARPA-E CONTRACTS IN THE PAST 6-8 YEARS AS PART OF THE PROGRAM. BUT, I'M NOT SURE OF THE WAY ALL 3 OF US NEED TO BE STRUCTURED FOR THE PROGRAM.

- 1. ---REDACTED--- IS NOT LICENSING ANY IP FROM THE TWO ENTITIES WITH PREVIOUS ARPA-E CONTRACTS BECAUSE THERE WAS NO IP GENERATED DURING THE PROGRAMS. BUT, THERE WAS PROCESS DEVELOPMENT DONE DURING THAT TIME AND WE WANT TO USE THE DEVELOPMENT THEY MADE. CAN MY COMPANY ACT AS THE LEAD IN THIS SITUATION SINCE WE ARE USING ARPA-E AWARDEES?**
- 2. CAN AN ENTITY PARTICIPATE IN THIS PROGRAM IF THEY WERE AWARDED AN ARPA-E CONTRACT, BUT IT WAS CANCELLED 2 YEARS INTO A 4 YEARS PROGRAM?**

ANSWER: 1. Please refer to FAQ 4.

2. Please refer to FAQ 4.

Q22. WHAT TYPES OF PREVIOUS AWARDS WOULD MAKE AN APPLICANT ELIGIBLE?

ANSWER: Please refer to FAQ 4.

Q23. COULD YOU PLEASE PROVIDE A LINK TO THE RECORDING OF THE SCALEUP 2023 WEBINAR FROM JUNE 22? I WANTED TO ATTEND, AND REGISTERED IN ADVANCE, INCLUDING RECEIVING REGISTRATION APPROVAL, BUT UPON REPEATED ATTEMPTS TO LOGIN, THE WEBEX SYSTEM STATED THAT MY REGISTRATION WAS NOT COMPLETED.

ANSWER: The SCALEUP 2023 Webinar can be found here: [ARPA-E Webinar: SCALEUP 2023 - YouTube](#).

Q24. THE RFP INDICATES THAT AN APPLICANT MUST HAVE AN I-EDISON NUMBER TO APPLY TO SCALEUP 2023.

DURING THE SCALEUP 2023 VIRTUAL PRESENTATION ON JUNE 22, 2023 THE QUESTION WAS ASKED WHETHER A COMPANY COULD APPLY THAT DID NOT HAVE AN I-EDISON NUMBER BUT WAS PREVIOUSLY FUNDED BY ARPA-E TO WHICH IT SEEMED THE ANSWER WAS "YES".

QUESTION: CAN A PREVIOUSLY ARPA-E FUNDED COMPANY APPLY TO SCALEUP 2023 WITHOUT AN I-EDISON NUMBER.

ANSWER: Refer to Section III. B. Subject Invention Disclosure of the FOA, If the SCALEUP 2023 Applicant filed an invention report prior to ARPA-E using iEdison and the period of reporting ended prior to the rollout of iEdison in 2016, ARPA-E will accept a DOE S Number for inventions that meet these criteria. The Format for a DOE-S# is "S" + 6 digits (S-#####).

Q25. I'M MAKING AN INQUIRY REGARDING THE GRANT PACKAGE ON THE GRANT.GOV WEBSITE OPPORTUNITY #DE-FOA-0003100. I AM AN INVENTOR LOOKING TO FUND THE FURTHER DEVELOPMENT AND LARGER PRODUCTION OF MY INVENTION. PRESENTLY I AM ENTERING INTO THE PROTOTYPING/FABRICATION STAGE. I AM THROUGH THE PHASE OF DEVELOPMENT WITH THE DEVICES CONCEPT AND RELATED METRICS. THE PATENT APPLICATION FOR THE DEVICE HAS ALSO BEEN SUBMITTED THROUGH THE USTPO, AND IS PENDING REVIEW.

BELOW YOU WILL FIND THE PITCH DECK RELATED TO AND INVENTION. PLEASE ADVISE ME IF IT AND MY RELATED PROJECT WOULD BE A GOOD FIT FOR THE ABOVE GRANT OPPORTUNITY.

I AM A FIRST TIME GRANT APPLICANT AND INVENTOR. I WAS LOOKING FOR OPPORTUNITY PACKAGES AND CAME ACROSS DE-FOA-0003100. I WAS LOOKING OVER THE DOCUMENT THAT OUTLINES THE RELATED CONCEPT PAPER. I WAS UNABLE TO REGISTER WITH IEDISON BECAUSE I DO NOT HAVE A FUNDING AGREEMENT NUMBER. I WOULD LIKE ADVISEMENT ON WHERE TO GET THAT. I AM ALSO AS I STATED A FIRST TIME APPLICANT AND DO NOT HAVE A PREVIOUS AWARD FROM ARPA RELATING TO MY PROJECT. THE FUNDING OPPORTUNITY SINCERELY LOOKS LIKE IT WOULD BE AN AMAZING FIT FOR MY PROJECT AND INVENTION.

THOUGH I FEEL I MAY BE IN THE WRONG PLACE TO SEEK INTEREST IN MY PROJECT. ATTACHED WILL BE SOME OF MY MATERIALS FOR YOUR REVIEW AND INTEREST. I APOLOGIZE FOR TAKING UP TIME AND POTENTIALLY BEING INCORRECT WITH MY ATTEMPT AT TRYING TO SUBMIT A PAPER FOR SOMETHING I MAY NOT QUALIFY TO APPLY FOR. I HOPE THAT I CAN SEEK INTEREST FROM ARPA AND THE DEPARTMENT OF ENERGY RELATING TO MY PROJECT THROUGH THE APPROPRIATE CHANNELS WITH FURTHER ADVISEMENT.

ANSWER: See FAQ 4.

Q26. WE HAVE TWO QUESTIONS REGARDING SCALEUP:

- (1) WILL ARPA-E ACCEPT PROPOSALS FROM SUB-RECIPIENTS OF PRIOR ARPA PROJECTS OR DO PROPOSALS NEED TO COME FROM PRIME RECIPIENTS OF PRIOR ARPA-E FUNDED PROJECTS?**

- (2) DURING A PRIOR ARPA-E FUNDED PROJECT, THE PRIME RECIPIENT AND SUB-RECIPIENT SEPARATELY DEVELOPED COMPONENT TECHNOLOGIES RELEVANT TO EACH ENTITIES' EXPERTISE, TO COMPLETE A SYSTEM. FOR SCALEUP, WILL ARPA-E ACCEPT PROPOSALS THAT FOCUS ON SUB-TECHNOLOGIES DEVELOPED DURING A PRIOR ARPA-E PROJECT, OR DOES THE PROPOSAL HAVE TO CONTINUE WITH ALL TECHNOLOGIES DEVELOPED DURING THE PRIOR ARPA-E PROJECT? IF YES, TO ACCEPTING PROPOSALS ON SUB-TECHNOLOGIES, CAN THE APPLICANT THEN PROPOSE AN EXPANDED USE OF THE SUB-TECHNOLOGY DEVELOPED AS A SUB-RECIPIENT DURING THE PRIOR ARPA-E PROJECT?**

ANSWER: 1) Prime applicants need to have control of subject inventions from previous ARPA-E awards, as per Section III.A in the FOA, regardless of their role in the initial ARPA-E award.

2) All eligible SCALEUP applicants must have control of at least one subject invention stemming from a prior ARPA-E award.

Q27. ON PAGE 28 OF THE FOA IT STATES:

"THE CONTENT AND CRITERIA FOR THE CONCEPT PAPER ARE DESCRIBED FURTHER IN SECTIONS *ERROR! REFERENCE SOURCE NOT FOUND.* AND V.A OF THE FOA RESPECTIVELY."

COULD YOU PLEASE CLARIFY. IS IT IV.A?

ANSWER: The content and criteria for the Concept Paper are described further in Sections IV.C and V.A of the FOA respectively.



Q28. IN THE FOA YOU STATE:

"FOR THE CONCEPT PAPER, LETTER(S) OF INTENT FROM COMMERCIALIZATION PARTNERS ARE NOT REQUIRED; HOWEVER, AT LEAST ONE IS REQUIRED FOR THE FULL APPLICATION. SUBMISSION INFORMATION REGARDING THE LETTER OF INTENT IS PROVIDED IN SECTION IV.D.4 OF THE FOA."

HOWEVER, IF WE WANT TO SUBMIT A LETTER OF SUPPORT/INTENT WITH THE CONCEPT PAPER, WHAT IS THE MECHANISM TO DO THIS?

LAST TIME WE ATTACHED LETTERS OF SUPPORT TO THE CP, FOLLOWING REFERENCES, AS ADDITIONAL PAGES.

UPON SUBMISSION WE WERE TOLD BY THE SYSTEM THAT ADDITIONAL PAGES WERE DISCARDED FROM CONSIDERATION, AS IT EXCEEDED THE LIMIT. DO YOU HAVE A SEPARATE MECHANISM FOR SUBMISSION OF LETTERS OF SUPPORT?

ANSWER: A Letter of Intent is not required for the Concept Paper submission, and will not be accepted or reviewed at this phase. As noted in Section IV. D.4 of the FOA, a letter of Intent from at least one Commercialization Partner is required for the Full Application .

Neither the Concept Paper Template nor ARPA-E eXCHANGE provide a mechanism to submit any Letter(s) of Intent at the Concept Paper stage.

Q29. WOULD ZERO-FUGITIVE EMISSION VALVES BE SOMETHING THAT WOULD BE APPLICABLE FOR THIS GRANT?

ANSWER: Please refer to FAQ 4.

Q30. COULD YOU PLEASE CLARIFY WHAT CONSTITUTES AN ARPAE INVENTION? IS AN IEDISON FILING SUFFICIENT, OR DOES A PROVISIONAL PATENT APPLICATION NEED TO EXIST?

ANSWER: See FAQ 4.

Q31. **REDACTED IS CURRENTLY PARTICIPATING IN AN ARPA-E GRANT WHOSE DURATION IS FROM AUG22 THROUGH AUG24. GIVEN THE SCALEUP PROGRAM SELECTS PARTICIPANTS IN FEB24, WOULD WE BE ABLE TO PARTICIPATE IN THE 2023 SCALEUP PROGRAM WITH ARPA-E WITH THIS 6 MONTH OVERLAP OR WOULD WE BE ABLE TO INITIATE THE START TO THE SCALEUP PROGRAM ONCE WE HAVE COMPLETE THE CURRENT GRANT WORK IN AUG24?**

ANSWER: See FAQ 4.

Q32. MY QUESTION IS WHETHER A PHYSICAL PROOF-OF-CONCEPT (VERSUS NUMERICAL SIMULATION) IS REQUIRED TO QUALIFY FOR SCALEUP FUNDING?

- **IN SECTION 1.B, IT STATES “THE SEEDING CRITICAL ADVANCES FOR LEADING ENERGY TECHNOLOGIES WITH UNTAPPED POTENTIAL 2023 (SCALEUP 2023) FUNDING OPPORTUNITY ANNOUNCEMENT PROVIDES A VITAL MECHANISM FOR THE SUPPORT OF INNOVATIVE ENERGY R&D THAT COMPLEMENTS ARPA-E’S PRIMARY R&D FOCUS ON EARLY-STAGE TRANSFORMATIONAL ENERGY TECHNOLOGIES THAT STILL REQUIRE PROOF-OF-CONCEPT.**
- **HOWEVER, IN OTHER SECTIONS IT SEEMS TO STATE THAT A PROOF-OF-CONCEPT IS REQUIRED TO QUALIFY FOR SCALEUP FUNDS**

FOR OUR IP, WE HAVE NOT DEMONSTRATED THE TECHNOLOGY THROUGH A PHYSICAL MODEL, BUT THE FOUNDATIONAL SYSTEM IT IS BASED UPON HAS BEEN DEMONSTRATED AND COMMERCIALIZED – ALTHOUGH OUR SPECIFIC DESIGN CONCEPT AND IP HAVE NOT.

ANSWER: Please refer to Section I.C and Section III.A of the FOA for more information.

Q33. MY COMPANY IS PLANNING TO SUBMIT A CONCEPT PAPER FOR SCALEUP 2023, AND HAS A QUESTION REGARDING COMMERCIALIZATION PARTNERS AND INDUSTRY FOCUS.

OUR TECHNOLOGY IS A PLATFORM SOLUTION THAT CAN OPERATE IN MULTIPLE INDUSTRIAL APPLICATIONS TO PERFORM A SIMILAR FUNCTION WITH VERY MINIMAL MODIFICATIONS REQUIRED. WE HAVE ACTIVE INDUSTRY PARTNERS IN BOTH APPLICATIONS THAT ARE INTERESTED IN BEING COMMERCIALIZATION PARTNERS FOR THIS PROJECT.

IS IT GENERALLY PREFERRED TO FOCUS ON A SINGLE APPLICATION WITH A SINGLE TYPE OF COMMERCIALIZATION PARTNER, OR IS THE IMPLEMENTATION OF A PLATFORM TECHNOLOGY IN MULTIPLE APPLICATIONS WITH MULTIPLE PARTNERS CONSIDERED OF INTEREST?

ANSWER: While Commercialization Partners are not required for the Concept Paper phase, you are welcome to include as many Commercialization Partners as you want, considering what you believe will result in the strongest application. Please refer to Section II.A.1 for more information on Commercialization Partners. Additionally, please refer to Section I.D. (Technical Categories of Interest).



Q34. WE ARE SUBMITTING A PROPOSAL TO THIS CALL AS A SUBAWARD, AND HAVE COMPLETED THE ARPA-E_111 BUDGET JUSTIFICATION WORKBOOK. IT DOES NOT APPEAR THAT THE TOTAL BUDGET IS IN THE CALCULATION FOR THE MATCH/COST SHARE PERCENTAGE. WE JUST WANT TO ENSURE THAT WE ARE SUBMITTING A CORRECT DOCUMENT. IS THAT A KNOWN DISCREPANCY OR IS THERE ANY ACTION WE CAN TAKE TO CORRECT THAT CALCULATION PRIOR TO SUBMISSION? OUR CALCULATIONS AMOUNT TO APPROXIMATELY 6.86% (\$407,538 REQUEST, \$30,000 MATCH)

Total Project Cost:	\$407,538.00	Cost Share Percent of Award:	7.36%
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FROM THE FOA: "IF THE PROJECT IS CONTINUED BEYOND THE COST SHARE GRACE PERIOD, THEN AT LEAST 10% OF THE TOTAL PROJECT COST (INCLUDING THE COSTS INCURRED DURING THE COST SHARE GRACE PERIOD) WILL BE REQUIRED AS COST SHARE OVER THE REMAINING PERIOD OF PERFORMANCE."

ANSWER: Refer to section IV. B. and C. of the FOA for the required Content and Form of Concept Papers. Forms for the Full Application will be available when the Full Application FOA is posted.

Q35. I HAVE TWO QUESTIONS ABOUT THE ABOVE-REFERENCED FUNDING OPPORTUNITY:

- 1. CAN OUR COMMERCIAL PARTNER BE A FOREIGN ENTITY?**
- 2. IF A FOREIGN COMMERCIAL PARTNER IS ALLOWED, MAY THE PARTNER'S ACTIVITIES FUNDED BY THE GOVERNMENT OCCUR IN A FOREIGN COUNTRY?**
- 3. YOUR WEBINAR OF LAST WEEK MADE IT CLEAR THAT THE TEAM QUALIFICATIONS, EXPERIENCE, AND CAPABILITIES IS AN IMPORTANT PROPOSAL EVALUATION CRITERIA. DOES THIS REFER SOLELY TO OUR EXISTING TEAM OR DOES IT ALSO EXTEND TO THE EXPANDED TEAM THAT WE WILL ESTABLISH IN THE TIME PERIOD AFTER PROPOSAL SUBMISSION?**

ANSWER: 1. and 2. Foreign partners are permitted. However, awardees are responsible for ensuring compliance with export control laws and regulations and ensuring that intellectual property is protected for US manufacturing requirements. See Section III. A of the FOA regarding Foreign Entities and Section E. Administrative and National Policy Requirements. Additionally, please refer to ARPA-E General FAQ 3.1.

3. See Section V. A. of the FOA for the Criteria For Concept Papers and Full Applications.

Q36. REGARDING PREVIOUS SCALEUP AWARDEES, HOW MANY HAVE BEEN IN THE EARLY STAGES (I.E., FIRST OR SECOND YEAR) OF THEIR PRE-SCALEUP PROJECT(S) AT THE TIME OF AWARD? HOW MANY HAVE BEEN IN LATE STAGES (I.E., FINAL YEAR) OF THEIR PRE-SCALEUP PROJECT(S) AT THE TIME OF AWARD? HOW MANY HAVE ALREADY COMPLETED THEIR PRE-SCALEUP PROJECTS AT THE TIME OF AWARD?

ANSWER: Please refer to the SCALEUP website for more information on the projects in the SCALEUP 2019 and SCALEUP 2021 cohorts: <https://arpa-e.energy.gov/technologies/scaleup>.

Q37. **REDACTED HAS ACQUIRED THE ASSETS AND TECHNOLOGY FROM A COMPANY THAT HAD BEEN A RECIPIENT OF, AND SUCCESSFULLY PERFORMED ON MULTIPLE SBIR PHASE 1 & 2 PROJECTS WITH MULTIPLE AGENCIES INCLUDING DOD, DOE, NASA, ETC. AS WELL AS DEPARTMENT OF COMMERCE ATP AWARDS (PREDECESSOR PROGRAM TO ARPA-E?).**

WE ARE TRYING TO UNDERSTAND OUR POTENTIAL ELIGIBILITY FOR THE ARPA-E SCALEUP 2023 OR OTHER PROGRAMS BASED ON THE PRIOR WORK. AND SOME FORMER EMPLOYEES THAT WERE LISTED AS PIS WILL BE LISTED AS ADVISORS AND/OR PART-TIME EMPLOYEES GOING FORWARD.

ANSWER: See FAQ 4.

Q38. IF AN ENTITY SUBMITTED AN ARPA-E SCALEUP PROPOSAL LAST YEAR, BUT WAS NOT SELECTED FOR AWARD, IS THE SAME ENTITY ELIGIBLE TO RE-SUBMIT THE SAME OR SIMILAR PROPOSAL FOR ARPA-E SCALEUP 2023?

ANSWER: Yes, if the entity meets the eligibility criteria provided in Section III A. of the FOA.

Q39. WE ARE PLANNING TO SUBMIT A CONCEPT PAPER TO THE SCALEUP FOA NUMBERED DE-FOA-0003100.

WE HAVE A FEW QUESTIONS LISTED BELOW...

- 1. IS COMMERCIAL SCALE EQUIPMENT AN ACCEPTABLE EXPENSE UNDER THIS FOA?
A. WE HAVE LARGELY CONFIRMED PERFORMANCE AT LAB-SCALE BUT NEED TO DEVELOP THE PROCESS PARAMETERS NECESSARY FOR COMMERCIAL SCALE PRODUCTION (ON COMMERCIAL SCALE EQUIPMENT).**
- 2. WE INTEND TO INCLUDE A PRIVATE COMMERCIAL PARTNER THAT WISHES TO INCORPORATE OUR MATERIAL INTO THEIR APPLICATION. IP AND A COMPETITIVE EDGE ARE EXCEPTIONALLY IMPORTANT TO THEM SO MUST THEY DISCLOSE RESULTS RELATED TO THEIR PRODUCT?**

ANSWER: 1. Yes, please refer to Section VII.L in the FOA for more information on equipment purchases.

2. Please refer to Section V.F in the FOA for information on project reporting requirements.

Q40. WE DO NOT HAVE AN IEDISON CONFIRMATION NUMBER BECAUSE WE HAVE NEVER RECEIVED ANY FEDERALLY FUNDED ASSISTANCE/GRANTS. HOWEVER, WE HAVE SECURED A LICENSE FOR A SUBJECT INVENTION THAT HAS SEVERAL PATENTS THAT WERE DEVELOPED FROM A PREVIOUS ARPA-E AWARD. IEDISON REQUIRES US TO SUPPLY A FUNDING AGREEMENT NUMBER, BUT WE HAVE NONE TO SUPPLY.

WHICH FUNDING AGREEMENT NUMBER SHOULD WE USE TO COMPLETE REGISTRATION IN IEDISON AS A LICENSEE OF A SUBJECT INVENTION?

ANSWER: Applicants that have licensed or purchased rights in ARPA-E subject inventions or software should enter the iEdison Number and Funding Agreement Number of the licensed subject invention where requested.

Q41. WE ARE REACHING OUT TO CLARIFY THE FOLLOWING: IN THE ARPA-E PORTAL, IN THE CONCEPT PAPER SUBMISSION FORM, THE FIRST TAB INCLUDES THE FOLLOWING TO BE FILLED IN:

- LEAD ORGANIZATION EFFORT %

CAN YOU PLEASE DEFINE THIS TERM FOR US?

ANSWER: The percentage of the Proposed work effort to be performed by the Lead Organization.

Q42. MAY I ASK THESE CLARIFYING QUESTIONS?

- 1. THE RESPONSIVENESS CRITERIA SAYS THAT THE FOLLOWING MAY BE DEEMED NONRESPONSIVE: "SUBMISSIONS THAT ARE NOT DISTINCT IN TECHNICAL APPROACH OR OBJECTIVE FROM ACTIVITIES CURRENTLY SUPPORTED BY OR ACTIVELY UNDER CONSIDERATION FOR FUNDING BY ANY OTHER OFFICE WITHIN DEPARTMENT OF ENERGY." DOES THIS APPLY TO PROPOSALS WHEREIN THE WORK IS NOT BEING FUNDED AT THE TIME OF THE START OF THE WORK PERFORMED UNDER AN ARPA-E SCALEUP AWARD? FOR EXAMPLE, THE WORK ON THE OLD GRANT COULD HAVE ENDED BY THAT TIME.**
- 2. CAN WE PROPOSE A PROJECT THAT COMBINES AN INVENTION THAT WAS FUNDED THROUGH A PAST ARPA-E AWARD, WITH ANOTHER INVENTION THAT WAS FUNDED THROUGH A DIFFERENT GOVERNMENT AGENCY (E.G. DOE) THAT IS NOT ARPA-E?**

ANSWER: 1. See FAQ 4

- 2. If the awardee has proposed citing an ARPA-E funded invention, there is no reason why they cannot incorporate another invention that is not funded by ARPA-E into the project.**

Q43. WE HAVE TWO PATENTS THAT WERE DEVELOPED THROUGH PRIOR ARPA-E FUNDING AND OUR RESEARCH GROUP IS INTERESTED IN APPLYING TO THE ARPA-E SCALEUP 2023 FUNDING PROGRAM. CAN YOU PLEASE ANSWER THE FOLLOWING QUESTION: CAN WE LICENSE OUR TECHNOLOGY TO MORE THAN ONE TEAM FOR THE ARPA-E SCALEUP PROGRAM?

ANSWER: Yes, you can license your technology to more than one team.

Q44. I HAVE 2 RELATED QUESTIONS:

- **WHAT IMPACT WOULD SCALEUP FUNDING HAVE, IF ANY, ON SUBJECT INVENTIONS OWNED BY A COMMERCIALIZATION PARTNER AND UNRELATED TO ANY ARPA-E OR OTHER FEDERAL AWARD?**
- **WHAT IMPACT WOULD SCALEUP FUNDING HAVE, IF ANY, ON SUBJECT INVENTIONS THAT WERE OR WILL BE CONCEIVED OF OR FIRST REDUCED TO PRACTICE BY THE PRIME RECIPIENT BUT SEPARATELY FROM THE SCALEUP AWARD, E.G. AS A RESULT OF A DEVELOPMENT AGREEMENT FUNDED BY A COMMERCIALIZATION PARTNER?**

ANSWER: 1. Only concepts based on ARPA-E subject inventions are eligible. Please refer to Section III.A. of the FOA

2. ARPA-E has not sought rights in inventions not funded by ARPA-E that are part of a SCALEUP project but there is no reason that could not be addressed during negotiations that may be advisable based on the actual SCALEUP project.

Q45. I HAVE A SMALL SET OF QUESTIONS TO ASK REGARDING THE SCALEUP PROGRAM.

- 1. IS IT OK IF THE FUNDED ARPA-E PROGRAM IS ONGOING? (I.E., THE PROJECT END DATE FOR PHASE II EXTENDS BEYOND THE START DATE FOR SCALEUP)?**
- 2. IS ONE AT A DISADVANTAGE AND/OR IS IT INAPPROPRIATE TO APPLY FOR SCALEUP IF THE TECHNOLOGY IS STILL IN PHASE I OF A RELEVANT ARPA-E PROGRAM?**
- 3. OUR PROPOSED TECHNOLOGY DESTROYS METHANE IN COAL MINES FOR BOTH METALLURGICAL COAL (I.E., FOR STEEL PRODUCTION) AND THERMAL COAL (I.E., FOR ENERGY GENERATION). AS SUCH, DO YOU RECOMMEND CATEGORY 7 (OTHER ENERGY TECHNOLOGIES) SUBCATEGORY F (INDUSTRIAL MATERIALS- EFFICIENCY) OR G (INDUSTRIAL MATERIALS- OTHER) OR CATEGORY 4 (POWER GENERATION AND ENERGY PRODUCTION: LIQUID AND GASEOUS FUELS/NUCLEAR) SUBCATEGORY F (CARBON CAPTURE).**
- 4. OUR PROPOSED TECHNOLOGY RELIES ON BOTH MECHANICAL THERMAL SYSTEMS AND MATERIALS SYSTEMS/ASSEMBLY SCALING. CAN WE SELECT TWO SCALING CATEGORIES? DO YOU HAVE A RECOMMENDATION ON HOW TO PROCEED?**
- 5. ARE WAIVERS FOR INTERNATIONAL PARTNERS NEEDED AT THE CONCEPT PAPER STAGE? IF SO, HOW DOES ONE APPLY FOR THEM?**

ANSWER: 1. Please refer to FAQ 4.

2. Refer to FAQ 4.
3. Select the category or categories that best fit your proposed technology. Applicants may select multiple Technical Subcategories from the same Technical Category or different Technical Categories. See Section I.D in the FOA for more information.
4. Applicants must select a single scaling category from the list provided in Section I.E of the FOA.
5. No, waivers are not needed at the concept paper stage but request for waivers are required for the Full Application submission.

Q46. I AM A FACULTY MEMBER IN A UNIVERSITY AND THE PI OF A PREVIOUSLY FUNDED ARPA-E PROJECT. WE HAVE FILED TWO PATENT APPLICATIONS RESULTED FOR THE ARPA-E FUNDED PROJECT AND THE UNIVERSITY HOLDS ALL THE RIGHTS. I UNDERSTAND THAT THE PRIME RECIPIENT IN SCALEUP PROGRAM MUST BE A COMPANY. I HAVE THREE QUESTIONS:

- 1. CAN THE UNIVERSITY BE A CO-PI IN SCALEUP, OR IT MUST BE A SUB-RECIPIENT?**
- 2. IS THERE A LIMIT ON HOW MUCH OF THE FEDERAL FUNDS CAN BE ALLOCATED TO THE UNIVERSITY IF THE UNIVERSITY IS PART OF A TEAM LED BY A COMPANY (THE COMPANY WILL BE THE PRIME RECIPIENT)?**
- 3. IS THERE A LIMIT ON HOW MUCH OF THE TOTAL COST SHARE CAN BE SHOULDERED BY THE UNIVERSITY?**

ANSWER: 1. Universities cannot be Co-PI's on a SCALEUP award.

2. The project team determines the funding allocations for their award.
3. Refer to section III. C.5. of the FOA.

Q47. A PAST ARPA-E SEED RECIPIENT, WE ARE DEVELOPING A DIRECT AIR CAPTURE TECHNOLOGY THAT WE AIM TO BEGIN SCALING UP, AND ARE INTERESTED IN APPLYING FOR THE ARPA-E SCALEUP PROGRAM. I HAVE A QUESTION FOR YOU THAT RELATES TO IP AND ELIGIBILITY FOR THE SCALEUP PROGRAM.

AS PART OF THE SEED PROGRAM, WE DEVELOPED A SERIES OF INITIAL PROTOTYPES AND EXPERIMENTS TO VALIDATE OUR PROCESS AT A SMALL SCALE. SINCE THEN, WE'VE ITERATED ON THESE PROTOTYPES TO DEVELOP A SYSTEM THAT WE BELIEVE IS READY TO BEGIN SCALING, AND HAVE DEVELOPED SOFTWARE AND IP THAT AROSE OUT OF SUBSEQUENT EXPERIMENTS INFORMED BY OUR ARPA-E RESEARCH. GIVEN THAT THIS IP DIDN'T DIRECTLY ARISE FROM THE SEED GRANT, BUT THAT THE CORE TECHNOLOGY WAS SUPPORTED, WOULD WE BE ELIGIBLE FOR SCALEUP FUNDING FOR THIS IP?

ANSWER: See FAQ 4.

Q48. WHAT HAPPENS IF A COMMERCIALIZATION PARTNER ENDS UP WALKING AWAY FROM THE PROPOSED PROJECT FOR UNFORESEEN BUSINESS REASONS?

ANSWER: ARPA-E strongly encourages you to team with a commercialization partner that will remain on the project as the loss of this partner has potential to jeopardize the project if they cannot be replaced.

Q49. WE HAVE TWO POTENTIAL ORGANIZATIONS WHO ARE LOOKING TO PARTNER WITH US, EACH OF WHICH HAVE A DIFFERENT USE CASE FOR OUR TECHNOLOGY. WE HAVE ONE PATENT IN IEDISON FOR THE ARPA-E PROGRAM THEY ARE CURRENTLY IN, AND IS IN THE PROCESS OF PREPARING ADDITIONAL PATENT INFORMATION. WOULD WE NEED TO HAVE A SECOND PATENT READY IN ORDER TO APPLY WITH BOTH PARTNERS AND TECHNOLOGIES OR IS HAVING TWO PARTNERS AND TWO USES FOR THE TECHNOLOGY SUFFICIENT FOR TWO APPLICATIONS?

ANSWER: Applicant organizations may only submit one Concept Paper and Full Application per Subject Invention to this FOA. Any supplemental or related subject invention disclosures may be referenced in the Project Plan Workbook.

Q50. I HAD THREE QUESTIONS REGARDING THIS SCALEUP 2023 FOA.

- 1. WHAT IF ANY TYPE OF CONSTRUCTION / RENOVATION / INFRASTRUCTURE CAN BE COVERED BY THIS GRANT**
- 2. ARE ENGINEERING FIRMS THAT CAN HELP WITH RENOVATION / INFRASTRUCTURE DESIGN AND PROCUREMENT ALLOWED ON THIS SCALE UP GRANT**
- 3. IS IT OK NOT TO CURRENTLY HAVE A BUILDING (OR LAB SPACE) AVAILABLE FOR THE SCALE UP OF OUR TECHNOLOGY ON THIS GRANT. IF SO, WHAT DOCUMENTATION WOULD BE REQUIRED (FOR EXAMPLE, COULD WE INCLUDE A LETTER OF SUPPORT FROM A LANDLORD STATING THAT THE SPACE WOULD BE AVAILABLE SHOULD WE RECEIVE THE GRANT?)**

ANSWER: 1. Construction is defined as all types of work done on a particular building, including erecting, altering, or remodeling. Subject to the pertinent cost principles (i.e., 2 C.F.R. Part 200, Subpart E or 48 C.F.R. Subpart 31.2) construction costs may be allowable.

2. Engineering firms are allowable for construction, but the proposed cost must be allowable, allocable, reasonable and determined to be necessary for the project. Basis of the cost such as engineering estimates must be provided.

3. It is not required to have a building/lab space identified for scaling the technology at the time of Concept Paper submission.

Q51. CAN A NATIONAL LAB COUNT AS A COMMERCIALIZATION PARTNER UNDER ARPA-E SCALEUP, IF THEY ARE INTERESTED IN BEING AN END-USER OF OUR POWER ELECTRONICS INVENTION?

ANSWER: Commercialization Partners may include potential customers, end-users, suppliers, strategic investors, manufacturers, distributors, or other important stakeholders for the commercialization of the subject technology. It is preferable for Applicants to have at least one Commercialization Partner that represents the viewpoint and needs of the target customer to help ensure market adoption for the technology after the completion of the SCALEUP project.

Commercialization Partners may be included as members of the Project Team or may be included as non-member third parties.

Please see Section II.A.1 in the FOA for more information.

Q52. HOW MANY DIGITS MUST BE ENTERED FOR THE SINGLE SUBJECT INVENTION NUMBER IN EXCHANGE?

ANSWER: Section III. B.1 of the FOA includes a format of 7 or 8 digits for the eligible iEdison invention numbers. The eXCHANGE site has since been changed to a 9-digit format. Please enter the complete iEdison invention number relevant to your subject invention.

II. Full Application Phase Questions:

Q53. WITH THE RELATIVELY SHORT TIME TO PREPARE THE APPLICATION AND THE THANKSGIVING HOLIDAYS COMING UP, WE WOULD LIKE TO REQUEST ARPA-E TO CONSIDER EXTENDING THE SUBMISSION DEADLINE TO PROVIDE ALL APPLICANTS SOME ADDITIONAL TIME TO PUT TOGETHER THEIR SUBMISSION PACKAGES. WE REALIZE THAT THIS IS A SIGNIFICANT ASK, BUT WE HOPE THAT YOU WILL CONSIDER OUR REQUEST.

ANSWER: At this time ARPA-E has no intentions to extend the submission deadline.

Q54. PER THE FOA, COMMERCIALIZATION PARTNERS ARE EXPECTED TO ACTIVELY PARTICIPATE IN THE PROJECT. ARE COMMERCIALIZATION PARTNERS REQUIRED TO CONTRIBUTE COST SHARE TO THE PROJECT?

ANSWER: As outlined in Section II.A.1 of the FOA, Commercialization Partners may optionally provide cost share contributions.

Q55. WE HAVE A QUESTION ABOUT COMMERCIAL PARTNER LOI REQUIREMENTS FOR THE CURRENT SCALEUP OPPORTUNITY. IF OUR COMMERCIAL PARTNER'S INTERNAL DRAFTING AND APPROVAL PROCESS FOR THEIR LOI TAKES LONGER THAN THE 45 DAYS ALLOTTED FOR THE PROPOSAL SUBMISSION, IS THERE ANOTHER WAY TO MEET THE REQUIREMENT FOR A LETTER OF INTENT FROM AT LEAST ONE COMMERCIALIZATION PARTNER?

ANSWER: No, As outlined in Section IV.D of the FOA, A Letter of Intent from at least one Commercialization Partner is required for the Full Application. letters

Q56. I HAVE A QUESTION ABOUT THE ARPA-E AND THE SCALEUP 2023 FOA DE-FOA-0003100 THAT HAS NOT ALREADY BEEN ANSWERED:

IF OUR TECHNOLOGY WAS:

- (1) PATENTED BY A GOVERNMENT ENTITY,**
- (2) THEN PROVEN BY A NON GOVERNMENTAL PARTY UNDER AN ARPA-E FUNDED PROGRAM WHILE THE PATENT HOLDER WAS NOT A PARTICIPATING IEDISON ENTITY AND DID NOT GET AN IEDISON NUMBER, AND**
- (3) THE GOVERNMENT ENTITY IS NOW AN IEDISON PARTICIPATING ENTITY,**

DO WE PUT 00000 AS OUR IEDISON NUMBER ON OUR ARPA-E SCALEUP CONCEPT PAPER OR IS THERE A PROCESS TO OBTAIN AN IEDISON NUMBER AFTER THE FACT?

ANSWER: Only organizations seeking to scale subject inventions created during an earlier ARPA-E award and reported in the iEdison system are eligible for funding under this program. See FOA Section III. A. The entity that made the asserted qualifying invention made under a prior ARPA-E award should report the subject invention in iEdison and have the associated iEdison number. As stated in the FOA, SCALEUP 2023 Applicants are not required to have participated within the original ARPA-E award – alternatively, Applicants may have licensed or purchased rights in such subject inventions or software and thereby become eligible for SCALEUP 2023. Thus, for the invention made by the Federal entity to be a qualifying invention, applicant should either have licensed the invention, in the process of negotiating a license or obtained ownership of the invention. Additionally, SCALEUP 2023's Concept Paper phase has concluded. Please keep in mind, in order for a Full Application to be compliant, an applicant must have submitted a compliant and responsive Concept Paper. See SCALEUP 2023 FOA Section III.D.1. Also, Full Application submissions that do not identify a subject invention from a prior or ongoing ARPA-E award may be deemed nonresponsive and may not be reviewed or considered. See FOA Section III.D.2. (Responsiveness Criteria).

Q57. THE FOA REFERENCES LETTERS OF INTENT FOR PROJECT PARTNERS. IT IS CLEAR BASED ON THE DESCRIPTION THE PURPOSE OF THESE LETTERS IS TO DESCRIBE THE ACTIVE PARTICIPATION OF THE PROJECT PARTNERS. CAN LETTERS OF SUPPORT FROM INTERESTED PARTIES (NOT DIRECTLY INVOLVED IN THE PROJECT, BUT INTERESTED IN THE TECHNOLOGY AND OUTCOME) BE SUBMITTED ALONG WITH THE LETTERS OF INTENT AND IF SO, WILL THEY BE CONSIDERED IN THE REVIEW PROCESS.

ANSWER: Yes. Please see SCALEUP 2023 FOA Section IV.D.4.

Q58. WE ARE WORKING TO COMPLETE OUR COMPLETE APPLICATION AND HAVE A QUESTION REGARDING THE BUDGET PROPOSAL. THE BUDGET WORKSHEET INCLUDES INVESTMENTS IN MACHINERY AND EQUIPMENT FOR SCALE UP THAT HAVE SIGNIFICANTLY LONG LEAD TIMES (18 MONTHS). AS IT IS POSSIBLE THAT WE WILL MAKE THE BUSINESS DECISION TO START MAKING SOME PAYMENTS TOWARDS THE EQUIPMENT SO THAT THE CLOAK WILL BEGIN ON DELIVERY. HOW CAN WE ADDRESS THIS IN THE BUDGET PROPOSAL? CAN THESE PAYMENTS BE COUNTED TOWARDS OUR COST SHARE?

ANSWER: Proposed equipment purchases should be entered on tab d. Equipment, of the Budget Justification/SF-424A Workbook Template. See the Budget Justification/SF-424 Workbook Guidance for additional guidance to complete the Equipment tab. Both the template and guidance can be accessed on ARPA-E eXCHANGE (<https://arpa-e-foa.energy.gov>). All costs incurred prior to finalizing an award are at the Recipient's risk.

ARPA-E may not provide pre-submission assessments on a project team's specific cost sharing requirement. Applicants should carefully review the cost sharing requirements for the specific FOA to which they intend to submit a Full Application. See section III. C. Cost Sharing of the FOA.

Q59. ---REDACTED--- LOOKS FORWARD TO SUBMITTING A FULL PROPOSAL FOR SEEDING CRITICAL ADVANCES FOR LEADING ENERGY TECHNOLOGIES WITH UNTAPPED POTENTIAL 2023 (SCALEUP 2023).

WOULD YOU KINDLY SEND ME ACCESS TO THE KITWORKS (DEPARTMENT OF ENERGY'S SECURE FILE-SHARING PLATFORM) FOLDER "SCALEUP 2023 - TEAM PITCH VIDEO".

ANSWER: To upload and submit the Team Pitch Video presentation video file, Applicants must utilize the DOE kiteworks™ platform. All Applicants who submit a Concept Paper and receive a notification to encourage submission of a Full Application (as outlined in Section V.D.2 of the FOA) will automatically receive an invitation via email within approximately 1-week of Concept Paper notifications to create an account on DOE's kiteworks™ platform, which will enable them to submit a Team Pitch Video as part of their Full Application. As noted in Section V.D.2, Applicants may submit a Full Application even if they receive a notification discouraging them from doing so. If such an Applicant intends to submit a Full Application, the Applicant must notify ARPA-E of their intent by sending an email to ARPA-E-CO@hq.doe.gov within 1-week of notification, with the subject line "Intent to Submit SCALEUP 2023 Full Application Team Pitch Video" so that they may receive an invitation to create an account on the kiteworks™ platform and submit the Team Pitch Video component of their Full Application. Access to upload files to DOE kiteworks™ will be sent to the Technical and Administrative Point of Contact Listed in eXCHANGE. Please see SCALEUP 2023 Section IV.D.2.

Q60. WE ARE TRYING TO UNDERSTAND THE DIFFERENCE BETWEEN SUBAWARDEES/SUBRECIPIENTS, COMMERCIALIZATION PARTNERS, AND PROJECT TEAM MEMBERS. SOME POTENTIAL COMMERCIALIZATION PARTNERS AND/OR PROJECT TEAM MEMBERS WOULD BE PAID THROUGH NON-SUBAWARD CONTRACTS TO CARRY OUT PRODUCTION/DEVELOPMENT THAT WOULD SUPPORT THE PROJECT.

- 1. CAN FUNDS FOR PRODUCTION/DEVELOPMENT BY BE FROM FEDERAL FUNDS, COST SHARE, OR SOME COMBINATION OF THEM BE PAID TO COMMERCIALIZATION PARTNERS? DOES IT MATTER IF THEY ARE ON THE PROJECT TEAM OR NOT?**
- 2. DO REPORTING REQUIREMENTS, MARCH-IN RIGHTS, OTHER REQUIREMENTS SPECIFIED IN THE FOA FLOW DOWN TO PROJECT TEAM MEMBERS, COMMERCIALIZATION PARTNERS, OR BOTH?**
- 3. DO PROJECT TEAM MEMBERS OR COMMERCIALIZATION PARTNERS NEED GOVERNMENT CONTRACT COMPLIANT ACCOUNTING SYSTEMS?**

ANSWER: 1. Sub-awardees and Subrecipients are the same and are project team members. Commercialization Partners may or may not be subrecipients and project team members. Yes, it can be federal funds, cost share or a combination of both. The prime recipient determines the federal funds and cost share allocations to their project team members. To receive funds a commercialization partner must be included as a member of the project team.

2. Yes, if they are members of the Project Team the requirements flow down to them.
3. Project team members must comply with the uniform guidance and applicable cost principles.

Q61. SINCE SUBMITTING A CONCEPT PAPER IN JULY, WE HAVE RECEIVED ADDITIONAL GRANT AWARDS AND WOULD LIKE TO MODIFY SEVERAL ASPECTS OF OUR PROPOSED PROJECT TO AVOID DUPLICATE FUNDING FOR CERTAIN PROJECT TASKS. IS A SCOPE CHANGE ALLOWABLE FROM CP TO FULL APPLICATION AS LONG AS THE OVERARCHING OBJECTIVE IS STILL TO SCALE THE ARPA-E FUNDED SUBJECT INVENTION?

ANSWER: Yes, as long as the scope isn't changed drastically and the application continues to be eligible, compliant, and responsive, pursuant to the FOA requirements.

Q62. IN THE BUSINESS ASSURANCES AND DISCLOSURES FORM, WE WERE UNABLE TO LOCATE THE SAMPLE RESPONSE ON ARPA-E EXCHANGE. FOR QUESTION (3) CURRENT, PENDING AND PAST SUPPORT, WHERE WE NEED TO LIST "ALL SPONSORED ACTIVITIES, AWARDS, AND APPOINTMENTS", WE ASSUME THAT THIS DOES NOT INCLUDE REVENUE FROM COMMERCIAL CONTRACTS OR EQUITY INVESTMENT INTO THE COMPANY. PLEASE CAN YOU CONFIRM THIS?

ANSWER: The Applicant and every other member of the Project Team must provide a list of all sponsored activities, awards, and appointments, whether paid or unpaid; provided as a gift with terms or conditions or provided as a gift without terms or conditions; full-time or part-time; cash or in-kind;

foreign or domestic; governmental or private sector; directly supporting the individual's research or indirectly supporting the individual by supporting students, research staff, space, equipment, or other research expenses.

Q63. I'M WRITING WITH TWO QUESTIONS ABOUT SCALEUP 2023:

- 1. CAN THE DEFENSE INDUSTRY (E.G., ARMED FORCES LIKE US AIR FORCE, DEFENSE CONTRACTORS LIKE LOCKHEED MARTIN) BE A COMMERCIALIZATION PARTNER AND/OR END-USER? OR IS THIS FOA ONLY LOOKING FOR NON-DEFENSE-RELATED APPLICATIONS?**
- 2. IF AN APPLICANT IS A CURRENT ARPA-E PERFORMER BUT HAS NOT YET COMPLETED THEIR ARPA-E PROJECT, ARE THEY ELIGIBLE TO PROPOSE TO THIS FOA? OR IS THIS FOA PRIMARILY TARGETED AT ARPA-E PERFORMERS WHO HAVE ALREADY COMPLETED THEIR EXISTING ENGAGEMENTS WITH ARPA-E?**

I NOTICE THAT MY QUESTION #2 IS THE SAME AS Q45.1, BUT I WASN'T ABLE TO DISCERN AN ANSWER FROM THE REFERENCED ANSWER, FAQ 4. FAQ 4 SAYS, "ONLY ORGANIZATIONS SEEKING TO SCALE SUBJECT INVENTIONS CREATED DURING AN EARLIER ARPA-E AWARD AND REPORTED IN THE IEDISON SYSTEM ARE ELIGIBLE FOR FUNDING UNDER THIS PROGRAM." BY THIS SENTENCE, ONE WAY TO READ IT IS IF THE INVENTION IS ONGOING, THEN IT WASN'T FULLY CREATED DURING AN EARLIER AWARD, SO THAT MEANS IF WE ARE CURRENT PERFORMERS THEN WE'RE NOT ELIGIBLE? OR MAYBE IT MEANS THAT SINCE THE INVENTION WAS CREATED IN PHASE 1, EVEN THOUGH PHASE 2 IS ONGOING, WE ARE ELIGIBLE?

ANSWER: 1. See FOA Section II. A. 1 of the FOA for partnering requirements.

2. Yes, See FOA Section III. A. of the FOA.

Only organizations seeking to scale subject inventions created during an earlier ARPA-E award and reported in the iEdison system are eligible for funding under this program. As outlined in the FOA section III.A., **this FOA is open to current and former ARPA-E awardees that propose to scale subject inventions or software that have resulted from the ARPA-E awards.**

Q64. UNDER THE ARPA-E RANGE PROGRAM, WE (COMMERCIAL ENTITY) WERE THE PRIME CONTRACTOR AND NRL WAS THE SUBCONTRACTOR.

A PATENT WAS ISSUED TO NRL AROUND 2017, ABOUT 2 YEARS AFTER THE PROGRAM, AS A DIRECT RESULT OF WORK WE DID WITH NRL UNDER THE RANGE PROGRAM.

NRL WASN'T A PARTICIPATING ENTITY AT THAT TIME AND DIDN'T GET AN IEDISON NUMBER. NRL IS NOW AN IEDISON PARTICIPATING ENTITY.

DO WE PUT 00000 AS OUR IEDISON NUMBER ON OUR ARPA-E SCALEUP PROPOSAL? IF NOT, DO YOU HAVE A STANDARD NUMBER USED WHERE AN IEDISON NUMBER DOES NOT CURRENTLY EXIST?

IF NOT, CAN YOU POINT TO A PATH FOR THE COMMERCIAL ENTITY TO FILL OUT THE ONLINE "PAPERWORK" TO GET AN IEDISON NUMBER?

ANSWER: A: The SCALEUP 2023 FOA states at section III.B.1: "If the SCALEUP 2023 Applicant filed an invention report prior to ARPA-E using iEdison and the period of reporting ended prior to the rollout of iEdison in 2016, ARPA-E will accept a DOE S Number for inventions that meet these criteria. The Format for a DOE-S# is "S" + 6 digits (S- #####)." Prior to NREL using iEdison, NREL submitted its ARPA-E-funded invention disclosures directly to DOE and such inventions would have an "S" number, which applicants should be able to obtain from NREL.

In addition to identifying a qualifying invention, see FOA section III.A: "SCALEUP 2023 Applicants are not required to have participated within the original ARPA-E award – alternatively, Applicants may have licensed or purchased rights in such subject inventions or software and thereby become eligible for SCALEUP 2023. This FOA is open to the following Applicants that propose to scale subject inventions or software that have resulted from ARPA-E awards... ii) Entities that are licensees of subject invention(s) or software arising from any ARPA[1]E award(s)..." As stated in response to Q.14, "a legally binding [license] agreement must be in place prior to full proposal, but such an agreement does not have to be in place before submission of a Concept Paper."

Q65. COULD YOU PLEASE PROVIDE EXAMPLES OF THE VARIOUS TYPES OF COST SHARE ARRANGEMENTS THAT PRIOR SCALEUP WINNERS HAVE USED? HOW MANY PREVIOUS SCALEUP AWARDEES HAVE USED THE VARIOUS TYPES OF COST-SHARING METHODS?

ANSWER: For general guidance on cost sharing see 2 C.F.R. § 200.306, 2 C.F.R. § 910.130, and 10 C.F.R. §§ 603.215, 603.525-555.

Q66. THE ORGANIZATION THAT I WORK FOR HAS SUBMITTED A CONCEPT PAPER, HOWEVER, WAS DISCOURAGED FROM APPLYING FURTHER. TAKING THAT FEEDBACK INTO CONSIDERATION, WE HAVE REVISED THE PROGRAM WE ARE LOOKING TO PROPOSE. ARE WE ABLE TO COMPLETE A FULL APPLICATION SUBMISSION BASED ON THIS NEW PROGRAM DESIGN OR ARE WE REQUIRED TO PROPOSE A PROGRAM BASED ON THE CONCEPT PAPER ORIGINALLY SUBMITTED?

ANSWER: It must be based on the subject invention proposed in the original concept paper.