

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 JUST CONFIRMING THAT THE ONLY ORGANIZATIONS THAT CAN APPLY TO THE SCALEUP FOA ARE ONES THAT HAVE PREVIOUSLY WON AN ARPAE AWARD WITH A SUBJECT INVENTION.

NO OTHER PROTOTYPES/ORGANIZATIONS/TEAMS ARE INVITED TO PARTICIPATE.

ANSWER: The program objectives for this FOA are discussed at Section I.C. As stated there:

This FOA focuses only on scale-up and pre-pilot projects of promising technologies that ARPA-E has funded – following highly competitive selection processes – and for which the scale-up would substantially build upon innovations achieved under the original ARPA-E award. Eligible projects will be based upon inventions that were conceived or first actually reduced to practice in the performance of work under the original ARPA-E award (“subject inventions”) with the intent to advance the innovative results to practical application. For SCALEUP 2021 Applicants, are not required to have participated within the original ARPA-E award – alternatively, Applicants may be licensed or have purchased rights in such subject inventions, and thereby become eligible for the SCALEUP 2021 FOA.

This information is reflected in the eligibility information for prospective SCALEUP 2021 Applicants set forth at FOA Section III.A:

Organizations leveraging subject inventions that were created during an ARPA-E award and reported in the iEdison system are eligible for funding under this program.

SCALEUP Applicants are not required to have participated within the original ARPA-E award – alternatively, Applicants may be licensed or have purchased rights in such subject inventions or software, and thereby become eligible for the SCALEUP 2021 FOA.

Q2. **REDACTED IS INTERESTED IN APPLYING FOR DE-FOA-0002641. WE HAVE SOME GREAT TECHNOLOGY WE ARE DEVELOPING AND WOULD LIKE TO SEE IT USED ON A MASS COMMERCIAL SCALE. IT ALREADY DEMONSTRATES SCALABILITY, IS IMPROVING RELIABILITY, AND HAS PROVEN ITS DOMESTIC MANUFACTURABILITY ON A SMALL SCALE.**

I WAS LOOKING AT THE APPLICATION AND SAW IT IS ASKING FOR AN AWARD NUMBER. SINCE WE CURRENTLY DON'T HAVE THAT, I WOULD LIKE TO SEE IF YOU COULD HELP US WITH THIS PART:

"APPLICANTS MAY BE LICENSED OR HAVE PURCHASED RIGHTS IN SUCH SUBJECT INVENTIONS OR SOFTWARE AND THEREBY BECOME ELIGIBLE FOR THE SCALEUP 2021 FOA."

HOW WOULD WE ACCOMPLISH GETTING LICENSED?

ANSWER: As described in Section III.A of the FOA, organizations must own the rights (as the original inventor or as a licensee of the subject invention) to the subject invention that is proposed to be scaled via the SCALEUP 2021 award at the time of Concept Paper submission. Organizations may document their interest in licensing an ARPA-E technology for use in the SCALEUP 2021 application by inputting their information on the SCALEUP 2021 Teaming Partner List, which is available on ARPA-E eXCHANGE portal (<http://ARPA-E-FOA.energy.gov>). Additionally, organizations may search the list of awarded projects on ARPA-E's website and contact relevant awardees to discuss opportunities to license technologies of interest.

Q3. RE: III. ELIGIBILITY INFORMATION

A. SCALEUP 2021 ELIGIBLE APPLICANTS - FOA PG 23.

THIS FOA DOES NOT APPEAR TO BE OPEN TO ANYONE THAT HAS NOT BEEN A PREVIOUS ARPA-E FUNDING RECIPIENT OR IS A NOT PARTY THAT IS USING TECHNOLOGY PREVIOUSLY DEVELOPED UNDER AN ARPA-E FUNDED PROGRAM. THAT IS, THIS IS NOT TRULY AN OPEN COMPETITION FOA. IS THAT A CORRECT UNDERSTANDING OF THE FOA LANGUAGE?

ANSWER: SCALEUP 2021 Applicants are not required to have participated within the original ARPA-E award – alternatively, Applicants may be licensed or have purchased rights in such subject inventions, and thereby become eligible for the SCALEUP 2021 FOA.

Q4. I HAD A FEW QUESTIONS REGARDING THE COST-SHARE RATE FOR SCALEUP 2021:

- 1. IS THERE A SPECIAL OVERHEAD RATE FOR NON-PROFIT UNIVERSITIES?**
- 2. IF WE ARE A SMALL BUSINESS DOING 1/3RD OF THE OVERALL PROJECT AT 20% COST-SHARE WITH A NON-PROFIT UNIVERSITY CAN THAT AFFECT THE OVERALL COST-SHARE RATE OR CAN THE RATE BE NEGOTIATED?**

ANSWER: 1. No

2. Please see Section III.C.3 Reduced Cost Share Requirement of the FOA.

Q5. ARE COMMERCIALIZATION PARTNERS REQUIRED FOR THE APPLICATION **HAVE TO BE COUNTED AS PART OF THE PROJECT TEAM?**

ANSWER: No - see FOA section II.A.1. (Partnering Requirements). Commercialization Partners may be included as members of the Project Team or may be included as non-member third parties.

Q6. WE ARE ACTIVELY CONSIDERING SUBMITTING OUR CONCEPT PAPER (DUE DATE 01 20 2022) UNDER SCALEUP 2021 WITH FUNDING OPPORTUNITY NO. DE-FOA-0002641. OUR QUESTION:

WE HAVE NOT BEEN AWARDED ANY PRIOR RESEARCH GRANT FOR OUR INTENDED R & D OF OUR PRODUCT. OUR PRODUCT (WHEN FULLY DEVELOPED) IS [DESCRIPTION DELETED] THIS TECHNOLOGY DOES NOT EXIST WITHIN THE US BUT IS BEING DEVELOPED IN THE EU AND CHINA AND IS IN ITS INFANCY. A SINGLE SENTENCE ELEVATOR PITCH FOR THIS TECHNOLOGY IS: THIS TECHNOLOGY HAS THE POTENTIAL TO TRANSFORM [DESCRIPTION DELETED] ARE WE ELIGIBLE TO SUBMIT OUR CONCEPT PAPER, EVEN IF WE DO NOT HAVE PRIOR GRANTS?

IF WE DO NOT QUALIFY FOR SCALE UP 2021, WHERE ELSE CAN WE SUBMIT OUR RESEARCH PROPOSAL? WE HAVE ALREADY SUBMITTED WITH SBIR.

ANSWER: See Section 1.C Program Objectives for eligibility requirements and see answer to question 3 above. ARPA-E regularly posts FOA's on its website: ARPA-E: Funding Opportunity Exchange (<http://ARPA-E-FOA.energy.gov>). If your technology fits one of those FOAs' eligibility criteria, you are encouraged to submit there.

Q7. (REDACTED**)**

I AM WRITING WITH A QUESTION REGARDING QUALIFICATION FOR SCALEUP: IS IT SUFFICIENT TO LEVERAGE SOME OF THE PUBLISHED WORK, SUCH AS THE PROJECT OUTPUT/JOURNAL ARTICLES CITED IN THE FINAL SCIENTIFIC/TECHNICAL REPORT, OF AN ARPA-E FUNDED PROJECT? WE HAVE IDENTIFIED SOME SPECIFIC TASKS DESCRIBED IN A SPECIFIC FINAL REPORT (WITH AN AWARD NUMBER DE-AR000XXXX) THAT WOULD BE INCORPORATED INTO OUR PROJECT. IT IS NOT CLEAR WHETHER THIS TASK RESULTED IN AN INVENTION OR PATENT, BUT THE TECHNOLOGY WAS PART OF THE WORK PRODUCT.

ANSWER: No. A broad variety of projects will be welcome, however to be eligible for SCALEUP funds, projects must be based upon inventions that were conceived through a prior ARPA-E award ("subject inventions") with the intent to advance the innovative results to practical application. This FOA is open to the following Applicants as outlined below, with additional information provided in FOA Section III.A:

- Current and former ARPA-E awardees (except Institutions of Higher Education and FFRDCs/DOE Laboratories) that own/control subject invention(s) or software arising from their ARPA-E award(s);
 - Entities that are licensees of subject invention(s) or software arising from any ARPA-E award(s);
- or

- Consortia – that have title to or are licensees of subject invention(s) or software arising from an ARPA-E award:
 - Must include one or more U.S. businesses; and
 - May include for-profit entities, educational institutions, and nonprofits that are incorporated in the United States, including U.S. territories, and FFRDCs/DOE Laboratories.

Q8. WHERE DO I GET AN "IEDISON CONFIRMATION [SUBJECT INVENTION] NUMBER? IN PROPOSED FORMAT FOR CONCEPT PAPER IS A LINE IN THE HEADING REQUESTING THE 'IEDISON CONFIRMATION NUMBER?'"

ANSWER: Obtain the iEdison subject invention number in iEdison (Access iEdison at <https://s-edison.info.nih.gov/iEdison/>) Use your iEdison subject invention number for this field. The invention report number format is: 7 or 8 digits + "-" + 2 digits + "-" + 4 digits. Example of subject invention number: 9412501-10-0123

Q9. QUESTION ABOUT SCALEUP DE-FOA-0002641.

PLEASE AMPLIFY HOW A NON-MEMBER COMMERCIALIZATION PARTNER

- 1) **WOULD A PARTNER WHO PROVIDES ADVICE ABOUT THE MARKET BE SUFFICIENT?**
- 2) **WOULD A PARTNER WHO PROVIDES MATERIALS TO BE TESTED IN THE PROJECT BE SUFFICIENT?**
- 3) **WOULD A PARTNER WHO PROVIDES TECHNICAL ADVICE BE SUFFICIENT?**

ANSWER: Please see Section II.A.1. Partnering Requirements of the FOA.



Q10. I WAS A US-DOE AWARD RECIPIENT ON A PROJECT THAT WAS COMPLETED A FEW YEARS AGO. THIS WORK RESULTED IN 2 US PATENTS TO THE ORGANIZATION I AM EMPLOYED AT, AND THESE PATENTS ARE STILL IN EFFECT.

I DID SUBMIT A CONCEPT PAPER TO COMMERCIALIZE THIS INVENTION LAST YEAR UNDER ARPA-E OPEN FOA, BUT WAS DISCOURAGED FROM SUBMITTING A FULL APPLICATION.

NOW, IF A PRIVATE COMPANY LICENSES MY INVENTION, WOULD THAT COMPANY BE ELIGIBLE TO SUBMIT A CONCEPT PAPER (TO COMMERCIALIZE MY INVENTION) UNDER THE CURRENT SCALEUP FOA? ARE ONLY THE ARPA-E FUNDED INVENTIONS ELIGIBLE UNDER THIS SCALEUP FOA?

ANSWER: Yes, only concepts based on ARPA-E subject inventions are eligible. An applicant must have ownership of, or a license agreement for, a subject invention in order to submit a Full Application based on that subject invention.

Q11. ANOTHER QUESTION: HOW STRICTLY WILL YOU BE ENFORCING THE MINIMUM AWARD SIZE. COULD A \$5,000,000 PROJECT (\$4,000,000 ARPAE+\$1,000,000) MATCHING QUALIFY

ANSWER: Not strictly - propose a budget for the appropriate size and scope of your submission.

Q12. WE ARE WRITING TO REQUEST THE INFORMATION IN REGARDS TO THE FOLLOWING: CURRENTLY, WE ARE IN THE PROCESS OF PREPARING AN APPLICATION FOR THE ARPA-E SCALE-UP PROGRAM, AND IN ORDER TO DO SO, WE WOULD NEED TO PROVIDE OUR ORIGINAL AWARD NUMBER, WHICH WE WON ALMOST A DECADE AGO, AS WELL AS THE DOE-S NUMBER, SINCE OUR REPORTING WAS BEFORE IEDISON ROLL OUT. PLEASE SEE THE BELOW REQUIREMENT:

"IF THE SCALEUP 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-#####)".

HOW CAN WE OBTAIN OUR DOE-S NUMBER?

ANSWER: If the relevant subject invention was reported to DOE prior to the requirement to use iEdison and you reported your subject invention in accordance with the terms of the award, you may submit the full title of your invention, and the award number, and note that you do not have the S number. If the subject was properly reported, and an S number was issued, ARPA-E will be able to locate the S number and include this in your application file. Alternatively, you can re-submit that subject invention information into iEdison. This will lead to a new subject invention report, and the system will provide a placeholder number – a "T" number – pending formal assignment of a DoE "S" number. You may use the T number for your SCALEUP Concept Paper if still awaiting the S number. In your Concept Paper, include your subject invention title, invention report number, and award number so that it can be linked in ARPA-E's old record.

Q13A. FOR THE SCALEUP PROGRAM, DOES THE APPLICANT HAVE TO HAVE THE LICENSE OF THE ARPA-E FUNDED TECHNOLOGY, WHEN APPLYING FOR THE CONCEPT PAPER (DUE ON 20TH JAN)?

ANSWER: 13A: NO, BUT THE LICENSE IS REQUIRED BEFORE SUBMISSION OF A FULL APPLICATION

Q13B. WE HAVE ALREADY NEGOTIATED THE TERMS FOR AN EXCLUSIVE LICENSE WITH [_____] UNIVERSITY WHICH OWNS THE IP DEVELOPED DURING OUR ARPA-E AWARD, AND ARE CURRENTLY AT THE LAST STAGE OF FINALIZING THE DOCUMENT. WE WILL AIM TO GET IT DONE PRIOR TO THE CONCEPT PAPER DUE DATE BUT IT WOULD BE GOOD TO KNOW IF THAT IS A NECESSARY TO APPLY FOR THE CONCEPT PAPER STAGE AT THE FULL APPLICATION STAGE.

ANSWER: 13B: SEE 13 A. ALSO, YOU MUST FILE A CONCEPT PAPER IN ORDER TO BE ELIGIBLE TO SUBMIT A FULL APPLICATION.

Q14. I REGRET WE MISSED THE WEBINAR. IS THERE A RECORDING ON THAT WEBINAR AVAILABLE?

ANSWER: Please see the “SCALEUP 2021 Program Virtual Webinar” posted on the ARPA-E website SCALEUP 2021 website (<https://arpa-e.energy.gov/technologies/scaleup/scaleup-2021>).

Q15. ARE LETTERS OF SUPPORT/COMMITMENT SUBMITTED WITH CONCEPT PAPERS? OR, AT WHAT STAGE CAN LETTERS BE SUBMITTED?

ANSWER: • No, letters of support are not required with the Concept Paper. To clarify the answer provided during the SCALEUP 2021 Webinar, the Concept Paper Template (available on ARPA-E eXCHANGE at <https://arpa-e-foa.energy.gov>) directs Applicants to identify any existing and proposed Commercialization/Financial Partners. Neither the Concept Paper Template nor ARPA-E eXCHANGE provide a mechanism to submit any Letter(s) of Intent at the Concept Paper stage.

• 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.

Q16. I OWN/CONTROL A SUBJECT INVENTION THAT WAS FUNDED BY ARPA-E BUT WAS NOT REPORTED IN IEDISON. WHERE CAN I ACCESS IEDISON AND HOW CAN I REPORT THE SUBJECT INVENTION? CAN/SHOULD I STILL REPORT THE SUBJECT INVENTION/RELATED PATENTS IN IEDISON IF OUR ARPA-E AWARD HAS ENDED?

ANSWER: Yes, even if the relevant ARPA-E award has ended, the awardee must report a subject invention in iEdison in accordance with the terms of that award(s). Access iEdison at <https://s-edison.info.nih.gov/iEdison/> Subject inventions must be reported through iEdison, prior to the SCALEUP 2021 Concept Paper deadline. Note that Subject inventions reported or referenced through other means (for example patents, patent applications, quarterly reports, ARPA-E ePIC system), do not establish eligibility for the SCALEUP 2021 FOA. To be eligible, the relevant subject invention report in iEdison must reference an ARPA-E award number (not the FOA number), entered in the eXCHANGE Application in the format: DE-AR##### Also note: upon reporting the invention in iEdison, the system will provide a placeholder number – a “T” number – pending formal assignment of a DoE “S” number. You may use the T number for your SCALEUP application if still awaiting the S number.

Q17. MY COMPANY HAS LICENSED TECHNOLOGY THAT WAS DEVELOPED UNDER AN ARPA-E AWARD [DESCRIPTION OMITTED]. WE ARE REQUIRED TO SUBMIT AN IEDISON NUMBER. WE HAVE NO IEDISON NUMBER AND WE CANNOT PROCEED WITHOUT SUBMITTING ONE.

ANSWER: For licensed technology that is eligible for this FOA, you will need to obtain the iEdison number, or any other relevant information for your application, from the licensor.

Q18. THE TECHNOLOGY WE DEVELOPED DURING AN [ARPA-E] PROJECT IS SOFTWARE TECHNOLOGY... WE UNDERSTAND THAT SOFTWARE NEED NOT REQUIRE IEDISON REPORTING/REGISTRATION.

ANSWER: Correct - Eligible Applicants may submit applications based on 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 large-scale energy systems.

Q19. MUST TECHNOLOGIES ARISING FROM SCALEUP 2021 AWARDS BE MANUFACTURED IN THE US?

ANSWER: Yes, ARPA-E requires that all products that embody SCALEUP 2021 inventions - or are produced through the use of a SCALEUP 2021 subject invention - be manufactured in the U.S. for any use or sale anywhere in the world. The US manufacturing requirement is applicable to ARPA-E funded subject inventions that are incorporated into/part of a SCALEUP 2021 project, whether arising during earlier ARPA-E research or any award resulting from the SCALEUP 2021 FOA. A SCALEUP 2021 awardee may request a modification of this US manufacturing requirement prior to or at any time after a SCALEUP 2021 award is finalized. Grant of any such request is at the discretion of ARPA-E/DoE and is based on satisfactory economic argument and the negotiation of an alternate requirement that provides a net benefit to the U.S. economy. DOE will determine whether to approve such a waiver in light of equitable considerations, including for example: (i) an applicant/awardee demonstrating to the satisfaction of ARPA-E/DoE that US manufacturing is not commercially/economically feasible, and, if not, (ii) whether there is a satisfactory alternative net benefit to the U.S. economy if the requested modification is approved. Though a modification may be requested at any time, alternative benefits may be more easily measured and evaluated after technical advance has been made under an award.

Q20. WHAT IS THE IMPACT OF A SCALEUP 2021 APPLICANT LICENSING, BEFORE THE SCALEUP 2021 FOA WAS PUBLISHED, SUCH EARLIER SUBJECT INVENTIONS TO A FOREIGN COMPANY FOR MANUFACTURING AND SALE OUTSIDE THE US?

ANSWER: Any such license, provided it complies with earlier award's requirements (flow-down of ARPA-E award intellectual property requirements, including any manufacturing requirements, etc.), will be "grandfathered" for purposes of the SCALEUP 2021 competition. That is, compliant licenses will not bar selection for award under the SCALEUP 2021 FOA, but may be considered as a factor in selection of applications under the FOA selection criteria, including weighing overall commercial benefits to the US economy.

Q21. IS THE TECHNICAL DATA DEVELOPED IN PERFORMANCE OF A SCALEUP 2021 AWARD MADE PUBLIC?

ANSWER: ARPA-E has special statutory authority to treat technical data first produced in performance of an award as trade secret-like for a period of time, normally five years from development. This right is automatically provided to for-profit Project Team members, and is readily available upon request to universities and nonprofit team members.

Q22. IN PERFORMING AN AWARD I WILL BE USING SOME PROPRIETARY DATA DEVELOPED AT PRIVATE EXPENSE OUTSIDE OF THE AWARD. WILL I BE REQUIRED TO DELIVER THAT PROPRIETARY DATA TO ARPA-E OR PROVIDE THE GOVERNMENT ANY RIGHTS IN THE PROPRIETARY DATA?

ANSWER: No. The Rights in Technical Data clause in ARPA-E awards expressly provides an awardee with the right to withhold from delivery to ARPA-E any proprietary data used in performance of an award. Proprietary Data may be included in oral presentations, including on-line presentations, as necessary to enable evaluation of work performance.

Q23. DOES ARPA-E HAVE AN SPECIAL POLICIES THAT APPLY TO PROJECTS THAT TARGET THE DEVELOPMENT OF SOFTWARE OR DATASETS?

ANSWER: Yes. ARPA-E treats the development of software that is the intended to be the specific target of a project much like new inventions, by requiring that such software be reported to ARPA-E, be subject to a Commercialization Plan, and be reported to ARPA-E in follow-on utilization reports.

Q24. IS IT NECESSARY FOR THE APPLYING TEAM TO HAVE THE LICENSE OF THE IP FROM ORIGINAL AWARD (IN CASE THEY WERE NOT THE RECIPIENT OF THE ORIGINAL AWARD), PRIOR TO SUBMITTING THE CONCEPT PAPER?

ANSWER: A license of the subject invention ("IP") is necessary before submission of a Full Application, and not before submission of Concept Paper.

Q25. IF OUR [SUBJECT INVENTIONS] ARE NOT IN IEDISON BECAUSE OUR PROJECT PRE-DATED/WAS PRIOR IEDISON ROLL OUT, CAN WE RETROSPECTIVELY ADD THEM NOW TO IEDISON?

ANSWER: Yes. See FAQ 12. If the relevant subject invention was not previously reported to DOE/ARPA-E, you may do so using iEdison. Please provide a rationale for failure to report the subject invention.

Q26. IF UNIVERSITIES ARE NOT ABLE TO BE PROJECT LEAD ARE THEY EXPECTED TO SELL THEIR IP TO AN ELIGIBLE COMPANY? IT WAS MY BELIEF UNIVERSITIES WERE LARGELY THE PROJECT LEADS FOR ARPA-E PROJECTS MEANING THEY CANNOT TAKE THIS TECHNOLOGY TO SCALEUP AS THE PROJECT LEAD

ANSWER: Universities may sell or license their subject inventions/intellectual property to an eligible applicant. Universities may not be Project Leads for SCALEUP 2021 projects.

Q27. PLEASE DISCUSS CONSORTIA OPTION. DOES THE LEAD NEED TO OWN OR HAVE A LICENSE TO THE SUBJECT INVENTION? (THE FOA GIVES 2 DIFFERENT INSTRUCTIONS ON OWNERSHIP/LICENSING OF IP ON CONSORTIA AND IP.). CAN A NON-PROFIT LEAD A CONSORTIA?

ANSWER: A. The consortium should own or have a license to the relevant subject invention. A non-profit corporation may serve as the organizing and administering entity of a consortia.

Q28. IP QUESTION- IS AN EXECUTED LICENSE FOR THE PATENT APPLICATION NECESSARY FOR SCALEUP?

ANSWER: See FAQ 24.

Q29. WE HAVE ARPA-E RELATED IP, BUT ALSO TECHNOLOGY DEMONSTRATED UNDER A SEPARATE DOE-SETO AWARD. IS THAT OK FOR A SCALE-UP?

ANSWER: See FAQ 1. An ARPA-E subject invention must be the nexus of the proposed SCALEUP project. Refer to Section III of the FOA for specific eligibility criteria.

Q30. CAN THE PROJECT SITE BE OUTSIDE THE US (I.E., CANADA) ASSUMING THAT ALL COMPONENTS ARE MANUFACTURED IN THE US?

ANSWER: Project work is required to occur in the United States, unless a partial exemption is granted, which is infrequent. This will depend on the specific facts and justification.

Q31. WILL THE PRIME APPLICANT WHO IS A STARTUP FOUNDER AND ALSO A FFDRG STAFF CAUSE A CONFLICT OF INTEREST AND ARE THEY ELIGIBLE TO APPLY AS PRIME APPLICANT?

ANSWER: This situation does not affect eligibility to apply for funding. Such a conflict of interest could be subject to mitigation, which could be addressed in award negotiations.

Q32. CAN A PREVIOUS SCALEUP (2019) APPLICANT APPLY AGAIN?

ANSWER: Yes.

Q33. AT WHAT STAGE OF THE CURRENT ARPA-E PROJECT OR AFTER THE PROJECT ENDS CAN A COMPANY APPLY FOR THE SCALEUP PROGRAM?

ANSWER: Reported subject invention arising from an on-going or completed ARPA-E project may be used for a SCALEUP proposal. See FAQ 1.

Q34. DOES THE SCALEUP PROPOSED PROJECT NEED TO BUILD UPON OUR SUBJECT INVENTION OR CAN THEY BE COMPLEMENTARY?

ANSWER: An ARPA-E subject invention must be the nexus of the proposed SCALEUP project. See FAQ 29.

Q35. IF THE ARPA-E PROJECT ADDED KNOWHOW BUT NOT PATENT, IS PROJECT POSSIBLE?

ANSWER: "Know how" is insufficient to qualify for SCALEUP eligibility.

Reported subject inventions arising from on-going or completed ARPA-E projects may be used for a SCALEUP proposal. See FAQ 1.

Q36. IS IT REQUIRED THAT THE SMALL BUSINESS ALREADY LICENSED THE IP FOR SUBMITTING THE CONCEPT PAPER?

ANSWER: See FAQ 24.

Q37. ANY RESTRICTION TO FOREIGN PARTNERS?

ANSWER: 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.

Q38. OUR FIRST ARPA-E AWARD PRE-DATED THE IEDISON SYSTEM. HOW DO WE HANDLE OUR SUBJECT INVENTION(S) FROM THE ORIGINAL ARPA-E AWARD IN THIS CASE?

ANSWER: See FAQs 12 and 25..

Q39. DOES THE US MANUFACTURING REQUIREMENT APPLY TO INTEGRATED CIRCUITS FABRICATED AS PART OF THE PROGRAM?

ANSWER: U.S. Manufacturing requirement applies to products that embody a subject invention or are produced through the use of a subject invention.

Q40. UNDERSTANDING THAT INDUSTRY OR COMPANIES NEED TO LEAD, IS IT OKAY IF THE ORIGINAL PROJECT WAS LED BY A UNIVERSITY AND THAT THE SCALEUP PROPOSAL LEAD IS A COMPANY WHICH HAS LICENSED THE UNIVERSITY IP?

ANSWER: Yes

Q41. DOES THE PRIME NEED TO HAVE THE RIGHT TO THE TECHNOLOGY? IF A SUBAWARD/COLLABORATOR HAS ACCESS TO THE TECHNOLOGIES, IS THAT ENOUGH?

ANSWER: See FAQ 24. The prime applicant will need rights in/licensee to the required ARPA-E subject invention prior to submission of a Full Application.

Q42. DOES THE SUBJECT INVENTION ARISING FROM AN ARPA-E AWARD HAVE TO BE THE MAIN SUBJECT OF A SCALEUP PROJECT, OR CAN IT BE JUST ONE COMPONENT?

ANSWER: See FAQ 1.

Q43. THANKS A LOT FOR THE PRESENTATION. SORRY THAT I MAY HAVE MISSED IT. (A) IF THE IPS ARE OWNED BY THE PARTICIPATING UNIVERSITIES RATHER THAN THE LEAD INDUSTRY APPLICANT, IS THIS ELIGIBLE TO APPLY? (B) ALSO, WHETHER THE INDUSTRY APPLICANT SHOULD BE PREVIOUS RECIPIENTS OF ARPA-E AWARDS? OR AS LONG AS THE PARTICIPATING UNIVERSITY RECEIVED PREVIOUS ARPA-E AWARDS FOR THE SAME TECHNOLOGY?

ANSWER: (a) The IP may be owned by the University that is not the lead, as long as the lead has a license. (b) The university may be the prior awardee.

Q44. CAN YOU PLEASE EXPAND ON THE SOFTWARE REQUIREMENTS AS OPPOSED TO SUBJECT INVENTIONS REQUIRED TO BE ELIGIBLE TO APPLY?

ANSWER: See FAQ 18.

Q45. WHAT IF THE "PROPOSED" INVENTION IS COVERED BY AN EXISTING PATENT APPROVED BEFORE AN ARPA-E AWARD WAS ACCEPTED - WOULD THAT INVENTION BE ELIGIBLE FOR SCALEUP FUNDING?

ANSWER: Only if the invention became and was reported as a subject invention because it was first actually reduced to practice during the performance of the ARPA-E award.

Q46. WE ARE IN THE PROCESS OF NEGOTIATING AN EXCLUSIVE LICENSE TO IP GENERATED BY AN ARPA-E PROJECT. AT WHAT POINT DOES THE LICENSE NEED TO BE IN PLACE FOR AN ENTITY TO BE ELIGIBLE TO APPLY- I.E. DO WE NEED THE LICENSE BY THE TIME OF CONCEPT PAPER SUBMISSION OR FULL APPLICATION?

ANSWER: See FAQ 24.

Q47. IS THERE AN ALTERNATE TRACK FOR OPEN SOURCE EFFORTS? THIS (UNDERSTANDABLY) PRESUPPOSES PROPRIETARY DEVELOPMENT OF PATENTED/PROTECTED PROJECTS...

ANSWER: See FAQ 1.

Q48. WE ARE A [CURRENT ARPA-E] AWARDEE, BUT EARLY IN DEVELOPING OUR SUBJECT INVENTIONS. WOULD OUR PROPOSAL BE ELIGIBLE WITH NOT YET PATENTED INVENTIONS?

ANSWER: See FAQ 7. If you have reported a subject invention arising from your ARPA-E project, it may be used for a SCALEUP proposal. It does not need to be patented yet.

Q49. DOES THE ARPA-E FUNDED TECHNOLOGY NEED TO COME FROM THE SMALL BUSINESS? OR CAN THE SMALL BUSINESS LICENSE ARPA-E FUNDED TECHNOLOGY ORIGINATED FROM UNIVERSITY.

ANSWER: The small business may license the funded technology/invention.

Q50. WOULD YOU CONSIDER FOR FUNDING A PATENTED REDESIGN OF [REDACTED] FOR BETTER ENERGY EFFICIENCY WHERE THE FUNDING WOULD BE FOR A PROOF OF CONCEPT?

ANSWER: As long as the research is focused on leveraging an ARPA-E subject invention, yes. See FAQ 1.

Q51. AM I CORRECT THAT IF ALL OR PART OF A PRESENT SOFTWARE PRODUCT WAS NOT DEVELOPED USING PREVIOUS ARPA FUNDING, THEN SCALEUP 2021 WILL REJECT AN APPLICATION BASED UPON THIS SOFTWARE PRODUCT?

ANSWER: If part of the software product was developed under an ARPA-E project, then the proposal would be eligible.

Q52. CAN AN INDUSTRIAL PARTNER BE A NON-US COMPANY AS LONG AS WORK AND MANUFACTURING IS IN THE US?

ANSWER: US subsidiaries of foreign companies may participate as members of project teams. Also, but see FAQ 37.

Q53. DOES A LICENSEE OF THE ARPA-E-DEVELOPED IDEA THAT WAS NOT PREVIOUSLY INVOLVED IN THE ARPA-E PROJECT QUALIFY TO APPLY?

ANSWER: See FAQ 1 - yes, the applicant may be a licensee of the relevant ARPA-E-funded subject invention.



Q54. SHOULD AN APPLICANT HAVE BEEN INVOLVED IN THE ARPA-E PROJECT THAT LED TO THE INVENTION. COULD THE APPLICANT BE A LICENSEE OF THIS TECHNOLOGY.

ANSWER: See FAQ 1.

Q55. CAN SUBJECT INVENTIONS THAT ARE PART OF A CLOSING PROJECT BUT WILL NOT BE CLOSE BY CP DEADLINE BE FUNDED?

ANSWER: Yes.

Q56. INVENTIONS THAT HAVE NOT BEEN FUNDED BY ARPA-E ARE NOT ELIGIBLE?

ANSWER: Correct.

Q57. NEED TO UNDERSTAND IF THE FUNDING IS ONLY AVAILABLE FOR PROJECTS FUNDED IN THE PAST BY ARPA-E (AND NOT EERE OR DOE IN GENERAL).

ANSWER: SCALEUP eligibility requires subject inventions funded by ARPA-E. See FAQ 1.

Q58. OUR IEDISON INVENTION IS QUITE GENERAL. WE HAVE TWO DIFFERENT APPLICATIONS OF THE INVENTION THAT WE BELIEVE ARE STRONG IDEAS FOR COMMERCIALIZATION. HOWEVER, THE FOA SAYS ONLY ONE APPLICATION PER IEDISON INVENTION. I'M DOUBLE-CHECKING THAT THERE IS NO WAY AROUND THIS?

ANSWER: You may submit multiple applications, but they must be scientifically/commercially distinct technologies (such as different fields of use).

Q59. DOES ARPA-E ACCEPT INTERNATIONAL PARTNERS? WITH INCREASED CONCERN OF A CERTAIN COUNTRY, DOES ARPA-E SET SOME NON-EXEMPT NATIONALITY OF THE PARTNERS?

ANSWER: See FAQ 37. All research under the award must be conducted in the US unless a special exemption is granted. Also, please see US Manufacturing requirements. See FAQ 19.

Q60. PLEASE CLARIFY REQUIREMENT TO HAVE PREVIOUSLY RECEIVED ARPA-E FUNDING OR PARTICIPATED IN ARPA-E PROGRAM. MY COMPANY HAS HAD NO FORMAL PARTICIPATION TO DATE.

ANSWER: There is no such requirement for SCALEUP. See FAQ 1.

Q61. CAN A COMPANY BE IN THE PROCESS OF BEING SET UP WHEN THE CONCEPT PAPER IS SUBMITTED. THE TECHNOLOGY THAT THE COMPANY WOULD LICENSE IS BASED ON ARPA PROJECT USING IP BEING FILED FROM A CURRENT PROJECT.

ANSWER: Yes, if the subject invention ("IP") has been properly reported.

Q62. WE HAD ONE OUTSTANDING FOLLOW-ON QUESTION THAT WASN'T ANSWERED: IS THERE A WAY TO CONNECT WITH OTHER PARTNERS TO BE A SUB-APPLICANT ON A CONCEPT SUBMISSION?

- **WE ASK BECAUSE WE WORK WITH CLIENTS WHO WOULD BE INTERESTED IN ACTING AS INTEGRATORS AND PARTNERS ON SOME OF THESE TECHNOLOGIES, BUT THEY HAVE NOT RECEIVED ARPA-E FUNDING BEFORE. IS THERE ANY WAY TO GET PLUGGED IN?**

ANSWER: Review and/or add yourself to the Teaming Partner List on ARPA-E eXCHANGE to document interest in participating in a potential SCALEUP project.

Q63. IF ALL MANUFACTURING OCCURS IN THE UNITED STATES, CAN THE PROJECT SITE ITSELF BE OUTSIDE THE UNITED STATES, SPECIFICALLY, CANADA?

ANSWER: Project work must be performed in the US. This requirement is subject to limited, partial waiver requests.

Q64. A FEW QUESTIONS WE DIDN'T HAVE TIME TO COVER IN THE PRESENTATION THAT I'D APPRECIATE YOUR PERSPECTIVE ON, AT YOUR CONVENIENCE:

- **WHAT IS THE DIFFERENCE BETWEEN A COMMERCIAL PARTNER AND A 3RD PARTY COMMERCIAL PARTNER? ARE THESE VIEWED DIFFERENTLY WHEN EVALUATING THE STRENGTH OF AN APPLICATION?**
- **WHAT ARE THE REQUIREMENTS ON A 3RD PARTY COMMERCIAL PARTNER? AS I EXPECT TO BE ASKING A NUMBER OF THE POTENTIAL CUSTOMERS WHO WE'RE EARLY DESIGN VALIDATION WORK WITH. I WANT TO ENSURE I PROPERLY REPRESENT WHAT SAYING "YES" ENTAILS FOR THEM.**

ANSWER: "COMMERCIALIZATION PARTNERS" ARE DEFINED IN THE GLOSSARY SECTION OF THE FOA, PAGE 76. THIS INCLUDES EXAMPLES OF EXPECTED CONTRIBUTIONS. ALSO SEE FOA SECTION II.A.1, PAGE 18 FOR FURTHER DESCRIPTION OF PARTNER CONTRIBUTIONS.

Q65. WE ARE IN THE PROCESS OF NEGOTIATING AN EXCLUSIVE LICENSE TO IP GENERATED THROUGH A PREVIOUS ARPA-E PROJECT. IN ORDER TO BE ELIGIBLE FOR SCALEUP, DO WE NEED THIS LICENSE IN PLACE BEFORE THE CONCEPT PAPER OR BEFORE THE FULL APPLICATION? WOULD AN OPTION TO AN EXCLUSIVE LICENSE SUFFICE FOR THE CONCEPT PAPER SUBMISSION IF IT IS TAKING TOO LONG TO FINALIZE THE FULL LICENSE AGREEMENT?

ANSWER: Please see FAQ 13 above.

Q66. SOME MORE QUESTIONS:

- 1) THE FOA INDICATES THAT IF A PROPOSAL REACHES THE FINAL STAGE, OUR COMMERCIALIZATION PARTNERS WILL NEED TO BE INTERVIEWED. WHAT INFORMATION CAN I PROVIDE POTENTIAL COMMERCIALIZATION PARTNERS ABOUT THE INTERVIEW SO THEY KNOW WHAT IS EXPECTED?**

ANSWER: Information on Oral Presentations is provided in FOA Section IV.A.5.

Q67. IS IT A REQUIREMENT THAT THE ORIGINAL ARPA-E PROJECT ENDS BEFORE STARTING THE SCALE-UP PROJECT, OR COULD THE END OF THE ORIGINAL ARPA-E PROJECT OVERLAP WITH THE START OF THE SCALE-UP PROJECT?

ANSWER: The original ARPA-E Project need not end prior to the start of the SCALE-UP Project.

Q68. WE ARE A LICENSEE OF IP THAT WAS CREATED WITH ARPA-E SUPPORT AND HAVE THE CORRESPONDING IEDISON FILING NUMBER(S) ETC. TO PROVE IT. ARE WE REQUIRED TO BE THE LEAD ORGANIZATION IN ORDER TO BE ELIGIBLE TO APPLY FOR THE SCALEUP 2021 FOA? CAN ANOTHER COMPANY BE THE LEAD ORGANIZATION EVEN IF THEY DIDN'T HAVE A LICENSE AS LONG AS WE ARE ON THE TEAM WITH THE APPROPRIATE LICENSE? IN OTHER WORDS, IS IT SUFFICIENT TO HAVE ONE MEMBER OF A TEAM WITH AN APPROPRIATE LICENSE WHILE THE LEAD ORGANIZATION DOES NOT HAVE A QUALIFYING LICENSE?

ANSWER: The Prime Applicant must have control of the lead subject invention for SCALEUP 2021. See FOA Section III.A for eligibility information.

Q69. 1) CAN A NON-PROFIT BE THE PROJECT TEAM LEAD IF IT IS A CURRENT OR FORMER ARPA-E AWARDEE THAT OWNS/CONTROLS SUBJECT INVENTION(S) OR SOFTWARE ARISING FROM ITS ARPA-E AWARD(S)?**2) CAN A NON-PROFIT BE A STANDALONE APPLICANT IF IT IS A CURRENT AND FORMER ARPA-E AWARDEES THAT OWN/CONTROL SUBJECT INVENTION(S) OR SOFTWARE ARISING FROM ITS ARPA-E AWARD(S)?**

ANSWER: No, a Non-Profit may not be the lead applicant. Refer to FOA Section III.A for eligibility information.

Q70. ORIGINALLY, WE WERE A SUB-RECIPIENT OF THE ARPA-E AWARD (2016-2019) WITH COMPANY X, WHO WAS THE PRIME APPLICANT. COMPANY X GOT THEIR PATENT IN 2019 AND THEN WE FILED A SEPARATE PATENT IN 2019. COMPANY X 'S PATENT WAS REPORTED TO ARPA-E AND GOT AN IEDISON NUMBER, WE DID NOT. OUR PATENT INCLUDES ADDITIONAL SUBSYSTEM THAT SIGNIFICANTLY ENHANCES THE SYSTEM PATENTED BY COMPANY X, SO IT MAY BE AN ADDITIONAL ENHANCEMENT TO THE PROPOSED CONCEPT.

PLEASE, CLARIFY, ARE WE ELIGIBLE TO APPLY FOR SCALEUP 2021 WITH COMPANY X'S IEDISON NUMBER?

ANSWER: If you own or have control of the subject invention (properly reported in iEdison) that resulted in your patent, then this would be an eligible invention for a SCALEUP application. Refer to FOA Section III.A for more information.

Q71. I UNDERSTAND THE US MANUFACTURING REQUIREMENT FOR THIS (AND ALL OTHER ARPA-E) FUNDING OPPORTUNITIES. ALSO HOWEVER, AS WAS MENTIONED DURING THE SCALEUP 2021 WEBINAR, THAT WHILE THE PRODUCTS DERIVED FROM ARPA-E FUNDED PROJECTS MUST BE MANUFACTURED IN THE US, THEY MAY BE SOLD GLOBALLY.

MY QUESTION IS WHETHER THE SCALEUP COMMERCIALIZATION PARTNER MUST BE IN THE US. CAN A US-BASED PRIME AND A US-BASED UNIVERSITY SUB-RECIPIENT HAVE A NON-US BASED COMMERCIALIZATION PARTNER?

ANSWER: There is no SCALEUP FOA prohibition on non-US commercialization partners. Refer to FOA Section II.A.1 for more information on partnering.

Q72. ARE THERE ANY REQUIREMENTS OR GUIDELINES ON THE USE OF FUNDS PROPORTION FOR CAPEX VS OTHER COSTS?

ANSWER: ARPA-E does not make a distinction for CAPEX as CAPEX would be captured in other cost 3categories. Proposed SCALE-UP costs must be allowable, allocable, and reasonable.

Q73. I HAVE A COUPLE OF QUESTIONS REGARDING THE ABOVE FOA:

*** THE CONCEPT PAPER FOA INDICATES THAT REFERENCES ARE ALLOWED AND DO NOT COUNT TOWARDS THE 4-PAGE LIMIT. IS THIS CORRECT? AND, IF SO: DOES THE INCLUSION OR EXCLUSION OF REFERENCES IMPACT THE CONCEPT NOTE JUDGING CRITERIA?**

ANSWER: Refer to the Concept Paper Template, available on ARPA-E eXCHANGE.

*** IS THE CONTROL NO. THE LAST FOUR DIGITS OF THE FOA (I.E., 2673 FOR THE DE-FOA-0002673)?**

ANSWER: The Control Number is the unique identifier for an Applicant's submission to the SCALEUP 2021 FOA, assigned by eXCHANGE.

Q74. I HAVE SOME QUESTIONS REGARDING THE ELIGIBILITY TO SUBMIT A PROPOSAL TO THE SCALEUP 2021.

WE ARE CURRENTLY PERFORMING ARPA-E PROJECTS AND MAKING A STARTUP COMPANY HERE.

THEN,

1. CAN THE STARTUP COMPANY AS A PRIMARY APPLICANT SUBMIT THE PROPOSAL?

ANSWER: Yes, provided that the startup company meets the eligibility criteria as defined in FOA Section III.A.

2. SHOULD THE RESEARCH TEAM INCLUDING THE STARTUP COMPANY INCLUDE ANOTHER COMPANY?

ANSWER: This is not required, however for additional information on Project Teams refer to the Eligibility Criteria defined in FOA Section III.A.

Q75. WE ARE CURRENTLY PURSUING AN EXCLUSIVE LICENSE FROM [REDACTED] FOR TECHNOLOGY DEVELOPED UNDER ARPA-E [REDACTED] PROGRAM.

PLEASE CONFIRM OUR ELIGIBILITY: CAN WE SUBMIT A CONCEPT LETTER WITH A LETTER OF SUPPORT FROM THE [LICENSOR] BEFORE A LICENSE AGREEMENT HAS BEEN EXECUTED?

AT THE TIME OF FULL PROPOSAL, WE WILL HAVE AN EXCLUSIVE OPTION AGREEMENT EXECUTED. AT PERIOD OF PERFORMANCE, THE AGREEMENT WILL HAVE OPTION EXECUTED WITH FULL COMMERCIAL LICENSE.

ANSWER: Yes. Refer to FAQ 13A and 13B. Concept Papers can be submitted prior to execution of the license agreement. Letters of Support are not required for Concept Paper submissions; Applicants should specify their intellectual property strategy in the appropriate section of the Concept Paper, using the Concept Paper Template available on ARPA-E eXCHANGE. The license agreement must be executed prior to submittal of the Full Application.

Q76. WE NOTE THE FOLLOWING IN THE FOA (SECTION C. PROGRAM OBJECTIVES - PAGE 6): ONLY ORGANIZATIONS LEVERAGING SUBJECT INVENTIONS THAT WERE CREATED DURING AN ARPA-E AWARD AND REPORTED IN THE IEDISON SYSTEM (WITH THE EXCEPTION OF SOME SOFTWARE PRODUCTS (SEE SECTION III.B.) ARE ELIGIBLE FOR FUNDING UNDER THIS PROGRAM.

[COMPANY REDACTED] WAS LEAD FOR OUR AWARD IN THE [REDACTED] PROGRAM. WE HAD THE US NAVAL RESEARCH LABORATORY (USNRL) AS A SUB.

THE TECHNOLOGY WE VALIDATED IN RANGE IS PATENTED BY THE US NAVY. [REDACTED LEAD COMPANY] HAS LICENSED AND IS COMMERCIALIZING THE TECHNOLOGY.

HOWEVER, THE USNRL DOES NOT PARTICIPATE IN IEDISON AND DECLINES TO DO SO. ARPA-E HQ HAS HAD SEVERAL CONVERSATIONS WITH THEIR TECH TRANSFER OFFICE.

DOES THIS DISQUALIFY [LEAD COMPANY REDACTED] FROM SCALEUP?

ANSWER: Since this subject invention arose under an ARPA-E award, and assuming the USNRL uses another invention reporting system, this invention would qualify for use in a SCALEUP application if the invention is owned or control by the Prime Applicant. The Prime Applicant must still provide all relevant information about the subject invention, excluding an iEdison number, per FOA requirements.

Q77. ARE COMMERCIALIZATION PARTNERS REQUIRED TO CONTRIBUTE CASH OR IN-KIND COST SHARE? IF SO, ARE THEY REQUIRED TO STATE THE TYPE AND AMOUNT OF COST SHARE IN THEIR LETTER OF INTENT?

ANSWER: Refer to FOA Section II.A.1 for information on Commercialization Partners. As specified in FOA Section III.C.6, “[e]ach Project Team is free to determine how much each Project Team member will contribute towards the cost share requirement”.

FOA Section IV.D.4 specifies that Letters of Intent should indicate whether a Commercialization Partner is committed to providing a specific minimum dollar amount of cost share for the Total Proposed Project Cost, and if so, the supplemental information that is required in the Letter of Intent (which includes cost share type).

Q78. DOES A CRADA RESEARCH AGREEMENT FOR A PROTOTYPE INSTALL OF THE PRODUCT CONCEPT, WITH THE [REDACTED DOE LAB], MEET THE REQUIREMENTS FOR A PARTNER UNDER THE PROGRAM REQUIREMENTS.

WE PLAN TO MOVE FORWARD WITH THEM TO CREATE A CRADA AGREEMENT, AS SOON AS WE HAVE FINAL NEW ON OUR ORIGINAL GRANT FUNDING FROM 2021.

ANSWER: Please refer to Section II.A.1 Partnering Requirements of the FOA.

Q79. IS IT POSSIBLE TO DOWNLOAD THE DECK FROM THE SCALEUP 2021 WEBINAR?

ANSWER: Refer to the ARPA-E SCALEUP website to view a recording of the webinar, which includes the slides shown during the presentation (<https://arpa-e.energy.gov/technologies/scaleup/scaleup-2021>).

Q80. QUESTIONS REGARDING ARPA-E SCALEUP 2021 PROGRAM.

1. **RE THE ARPA-E GRANT REQUIREMENT: DOES THE QUALIFYING ARPA-E GRANT NEED TO BE FULLY COMPLETED, INCLUDING FINAL REPORTING IN ORDER TO APPLY?**

ANSWER: No. Refer to FAQ 69.

2. **RE: TECHNOLOGY AREAS OF FOCUS: DOES CARBON DIOXIDE CAPTURE AND SEQUESTRATION/REPURPOSING QUALIFY AS A TOPIC AREA?**

ANSWER: Technical Categories of Interest are specified in FOA Section I.D, which includes a sub-category for “Other Energy Technologies Not Listed Above”.

Q81. ARE DOE-FUNDED TECHNOLOGIES THAT ARE PATENTED IN THE US ELIGIBLE TO APPLY FOR THIS SCALEUP FUNDING?

ANSWER: Refer to FOA Section III.A for eligibility information.

Q82. QUESTION ON SCALEUP 2021 – DE-FOA-0002461:

ONE QUESTION ON ANY HARD REQUIREMENTS FOR PROJECT DURATION FOR SCALEUP 2021. IN PREVIOUS SOLICITATIONS WE HAVE PARTICIPATED IN, ARPA-E PROJECTS HAD A MAXIMUM PERMITTED PROJECT DURATION OF 36 MONTHS. FOR SCALEUP 2021, MUST THE PERIOD OF PERFORMANCE LISTED IN THE CONCEPT PAPER BE A MAXIMUM OF 36 MONTHS, OR COULD A LONGER PERIOD OF PERFORMANCE BE USED (E.G. 48 MONTHS)? I SEE IN THE FOA THE SENTENCE “THE PERIOD OF PERFORMANCE FOR FUNDING AGREEMENTS IS ANTICIPATED TO BE APPROXIMATELY 36 MONTHS.” THIS STATEMENT DOES NOT SEEM TO DEFINE A HARD LIMIT OF 36 MONTHS AS IN PREVIOUS SOLICITATIONS.

ANSWER: Applicants should propose the period of performance that is suitable for their proposed SCALEUP project/objectives, based on their independent determination after reading the Funding Opportunity Announcement.

Q83. A SECOND QUESTION ON THE INFORMATION REQUIRED IN THE CONCEPT PAPER. IN THE PAST, SOME SOLICITATIONS REQUIRED LISTING THE TECHNOLOGY CATEGORY IN THE TITLE INFORMATION OF THE CONCEPT PAPER. IN THE TEMPLATE PROVIDED, IT DOES NOT APPEAR THAT THE TECHNOLOGY OR SCALING CATEGORIES ARE REQUESTED TO BE IDENTIFIED IN THE CONCEPT PAPER, BUT THEY ARE REQUESTED IN SEPARATE FIELDS IN THE ARPA-E EXCHANGE APPLICATION PORTAL. IS NOT INCLUDING THE TECHNOLOGY AND SCALING CATEGORY INFORMATION IN THE CONCEPT PAPER TEMPLATE INTENTIONAL?

ANSWER: The Technical and Scaling Categories are intentionally only requested in the eXCHANGE portal. They do not need to be indicated on Concept Papers documents.

Q84. I WATCHED THE VIDEO AND READ THE FOA FAQ REGARDING SCALEUP2021. WE HAVE AN INDUSTRY PARTNER FOR OUR TECHNOLOGY. WE ARE CURRENTLY EVALUATING WHAT THEIR ROLE IS, WHICH WOULD BE EITHER PART OF THE PROJECT TEAM OR AS A NON MEMBER THIRD PARTY. DO WE NEED TO DECIDE ON THAT AS PART OF THE CONCEPT PAPER, OR CAN WE INDICATE THAT WE ARE STILL EVALUATING THE BEST MECHANISM, AND THEN FINALIZE THIS IN THE FULL PROPOSAL?

ANSWER: In your Concept Paper, you may indicate that you are still evaluating the best role for the industry partner. Refer to the Concept Paper Template (Section 4) for information requested regarding existing/potential partners at the time of Concept Paper submission.

Q85. REGARDING THE SCALEUP 2021 SOLICITATION, ARE DEPARTMENT OF DEFENSE (DOD) CUSTOMERS ALLOWED TO PARTNER ON THE PROJECT? WILL LETTERS OF SUPPORT/LETTERS OF INTENT BE ACCEPTED FROM DOD CUSTOMERS/PARTNERS?

ANSWER: Yes.

Q86. WE ARE A CURRENT AWARD RECIPIENT (DE-AR000#####). WE ARE ABOUT ½ WAY THROUGH THE PROJECT AND AHEAD OF SCHEDULE (HALF WAY MILESTONE HAS BEEN COMPLETED). THE FOA-#####DOCUMENT (GOVERNING OUR CURRENT AWARD) MENTIONS A RENEWAL AWARD IS A POSSIBILITY.

I'M PRIMARILY INTERESTED IN KNOWING IF WE APPLIED FOR THE SCALEUP PROGRAM BUT WERE UNSUCCESSFUL, WOULD WE IN THE PROCESS HAVE DISQUALIFIED OURSELVES FOR A POTENTIAL RENEWAL AWARD OR EVEN DELAYED THE PROCESS?

ANSWER: Applying for SCALEUP funding will not disqualify a current ARPA-E awardee from seeking supplemental funding under its current award.

Q87.**1) REGARDING THE CONCEPT PAPER REQUIREMENTS, IS THE ARPA-E ASSIGNED CONTROL NUMBER THE SAME AS THE FUNDING OPPORTUNITY NUMBER?**

ANSWER: No. Applicants will be allocated a Control Number from eXCHANGE during the application process (after starting their application and selecting 'Save', the Control Number will be available). The Funding Opportunity Number is different and is located on the front page of the FOA.

2) REGARDING THE CONCEPT PAPER REQUIREMENTS, DOES THE PRINCIPAL INVESTIGATOR HAVE TO BE AN EMPLOYEE OF THE LEAD ORGANIZATION OR CAN THE PI BE FROM A COLLABORATIVE ORGANIZATION?

ANSWER: A Principal Investigator should come from the Prime Recipient. There may be additional Principal Investigators from sub-recipient Project Team members.

3) REGARDING THE CONCEPT PAPER REQUIREMENTS, GIVEN THAT THE CONCEPT PAPER IS LIMITED TO FOUR PAGES IS A SIMPLE TABLE INCLUDING THE COST OF MILESTONES, TASKS, GO/NO GO DECISION POINTS AND TIMELINE OF A QUARTER PAGE SUFFICIENT TO SATISFY THE REQUIRED BUDGETARY STATEMENT?

ANSWER: Applicants should reference the Concept Paper Template and follow the guidelines/instructions to the best of their ability.

4) REGARDING THE FUNDS RECEIVED FROM THIS FOA, IS IT ALLOWABLE TO PLACE THE FUNDS IN AN INTEREST-BEARING ACCOUNT AND IF SO, HOW IS THAT INTEREST TO BE TREATED WITH RESPECT TO WHETHER THE INTEREST IS FEDERAL DOLLARS OR NONFEDERAL DOLLARS?

ANSWER: ARPA-E only reimburses costs as incurred. The premise of the question is incorrect – ARPA-E does not advance payment of costs.

5) REGARDING COST SHARE AS OUTLINED IN SECTION III, PARAGRAPH 6, WITH RESPECT TO IN-KIND CONTRIBUTIONS, HOW IS THE VALUATION OF INTELLECTUAL PROPERTY (IP), E.G., PATENTS DEVELOPED WITHOUT FEDERAL FUNDING CALCULATED?

ANSWER: This question raises an unique issue that will affect full applications, and a response will be provided before full applications are due.

Q88. WILL THE IDENTITY OF THE COMMERCIALIZATION PARTNER BE KEPT CONFIDENTIAL? IS THERE ANY CHANCE THAT THEIR NAMES WILL BE AVAILABLE PUBLICLY?

ANSWER: Application information is treated confidentially to the fullest extent of the law. Applicants are reminded to mark their applications on each page, in bold: "Contains Confidential Business/Proprietary Information – For Application Purposes Only" or similar.

**Q89. WE HAVE CHECKED THE FAQ PAGE AND THE ANSWER, WHICH IS BELOW, IN PARTICULAR:
" IF THE RELEVANT SUBJECT INVENTION WAS REPORTED TO DOE PRIOR TO THE
REQUIREMENT TO USE IEDISON AND YOU REPORTED YOUR SUBJECT INVENTION IN
ACCORDANCE WITH THE TERMS OF THE AWARD, YOU MAY SUBMIT THE FULL TITLE OF
YOUR INVENTION, AND THE AWARD NUMBER, AND NOTE THAT YOU DO NOT HAVE THE S
NUMBER."**

**NEVERTHELESS, THE SYSTEM STILL REQUIRES US TO PROVIDE THE DOE-S NUMBER AS A
MANDATORY FIELD. PLEASE LOOK INTO THE ATTACHMENT.**

**PLEASE ADVISE WHAT SHOULD WE DO IN THIS CASE, SINCE WE DO NOT HAVE A DOE-S
NUMBER.**

ANSWER: Refer to FAQ 12, which includes: "...Alternatively, you can re-submit that subject invention information into iEdison. This will lead to a new subject invention report, and the system will provide a placeholder number – a "T" number – pending formal assignment of a DoE "S" number. You may use the T number for your SCALEUP Concept Paper if still awaiting the S number. In your Concept Paper, include your subject invention title, invention report number, and award number so that it can be linked in ARPA-E's old record."

**Q90. IN ORDER TO PARTICIPATE IN THE SCALEUP PROGRAM IS IT ABSOLUTELY NECESSARY
THAT THE TEAM IN QUESTION BE THE RECIPIENT OF A PREVIOUS ARPA-E AWARD? OR THE
LICENSOR OR OWNER OF TECHNOLOGY RESULTING FROM A PREVIOUS ARPA-E AWARD? WHAT
IF WE HAVE OUR OWN PATENT PENDING TECHNOLOGY AND WE ARE LOOKING FOR AVENUES
AVAILABE THROUGH DOE FOR RESEARCH, DEVELOPMENT, AND TESTING OF OUR
TECHNOLOGY? WHEN IS THE FOA FOR "OPEN 2022" GOING TO BECOME AVAILABLE?**

ANSWER: See FAQ 3. Not necessary for the applicant to be the recipient of a previous ARPA-E award. Applicants must own/control rights to the subject invention proposed for the SCALEUP project. Refer to FOA Section III.A for more eligibility information.

**Q91. WE ARE WRITING IN REGARDS TO THE PARTNERING REQUIREMENTS FOR THE ARPA-E
SCALE UP PROGRAM:**

- **DOES THE PARTNER GET REIMBURSED FROM THE GRANT AWARDS FROM THEIR
CONTRIBUTION IF WE ALLOCATE A PERCENTAGE EFFORT TO THEM? AND IS THAT A
REQUIREMENT?**

ANSWER: See FOA Section III.C.5: "Each project Team is free to determine how much each Project Team member will contribute towards the cost share requirement. The amount contributed by individual Project Team members may vary, as long as the cost share requirement for the project as a whole is met."



Q92. DO COST SHARE CONTRIBUTIONS HAVE TO COME FROM A TEAM BASED IN U.S.?

ANSWER: No.

Q93. CAN THE TEAM PITCH VIDEO FOR FULL APPLICATION BE JUST A POWERPOINT PRESENTATION VIDEO?

ANSWER: Read FOA Section IV.D.2 for more information on Team Pitch Videos.

Q94. WHAT IS THE IDEAL TRL LEVEL FOR A SCALEUP PROJECT?

ANSWER: As stated in FOA Section I.A, ARPA-E supports high-risk, potentially transformational energy technologies. As a result, the agency does not specify Technology Readiness Levels (TRLs) within any funding opportunities (including SCALEUP). Instead, refer to the evaluation criteria in FOA Section V.A.1.

Q95. WE RECENTLY ATTEMPTED TO REGISTER OUR SUBJECT INVENTION IN IEDISON. HOWEVER, AFTER REGISTERING ON IEDISON, WE RECEIVED AN EMAIL FROM IEDISON STATING OUR SUBMISSION IS PENDING AND THE PROCESS TAKES 2-4 WEEKS. CAN YOU ADVISE ON HOW WE CAN SUBMIT THE SUBJECT INVENTION AND OUR CONCEPT PAPER, WHEN THE WEB BASED CONCEPT PAPER SUBMISSION PROCESS IS SUCH THAT WE CANNOT DO SO WITHOUT AN IEDISON NUMBER?

ANSWER: Append to your Concept Paper 1) the email that you received from iEdison, and 2) a detailed description of your subject invention, including title of your invention and ARPA-E award number. Then, to complete your SCALEUP 2021 submission: for the iEdison Number field use the following “placeholder” invention report number: 0000000-00-0000

II. Full Application Phase Questions:

Q96. HI I HAVE A QUESTION ABOUT ARPA-E SCALEUP. I READ THE FAQ, AND QUESTIONS ABOUT WHETHER OR NOT YOU NEED A LICENSE TO THE TECHNOLOGY CAME UP SEVERAL TIMES. I GET THAT A LICENSE IS NEEDED, BUT IT WAS ALSO EXPLICITLY ASKED IF AN OPTION AGREEMENT WOULD BE SUFFICIENT, AND THERE WAS NO EXPLICIT ANSWER GIVEN. I AM THE ORIGINAL INVENTOR OF THE TECHNOLOGY INVOLVED IN A STARTUP COMPANY COMMERCIALIZING THE TECHNOLOGY. THE IP IS OWNED BY MY UNIVERSITY, BUT NEGOTIATING A FULL/EXCLUSIVE LICENSE AGREEMENT TAKES TIME, AND LIKELY CAN'T BE FINISHED IN TIME FOR THE FULL APPLICATION DEADLINE. HOWEVER, AN OPTION AGREEMENT WHICH GUARANTEES THE ABILITY TO GET A LICENSE, CAN BE NEGOTIATED (AND PAID FOR) MUCH MORE QUICKLY – IN TIME FOR THE DEADLINE. I HAVE READ THE RESPONSE FOR 13A AND 13B ALREADY. MY QUESTION IS EXPLICITLY WHETHER OR NOT AN OPTION AGREEMENT CAN SUFFICE FOR MEETING THE REQUIREMENT OF A LICENSE IN A FULL APPLICATION? MORE EXPLICITLY, IF MY COMPANY SUBMITS A FULL APPLICATION AND DOES NOT HAVE A FULL LICENSE, BUT INSTEAD ONLY HAS AN OPTION AGREEMENT IN PLACE, WILL THE PROPOSAL BE RETURNED WITHOUT REVIEW I.E., BE CONSIDERED INELIGIBLE?

ANSWER: An option agreement for an exclusive license will be acceptable for consideration of a Full Application. If selected for award, prior to the award being finalized, ARPA-E will require the execution of that exclusive license. ARPA-E may inspect the license prior to award. See FOA footnote 10 in section III.A. "Eligibility Information."

Q97. ONE ADDITIONAL POINT ABOUT THIS QUESTION ABOVE (Q96). THE FOA STATES "SCALEUP 2021 APPLICANTS ARE NOT REQUIRED TO HAVE PARTICIPATED WITHIN THE ORIGINAL ARPA-E AWARD – ALTERNATIVELY, APPLICANTS MAY BE LICENSED OR HAVE PURCHASED RIGHTS IN SUCH SUBJECT INVENTIONS, AND THEREBY BECOME ELIGIBLE FOR THE SCALEUP 2021 FOA." PURCHASING AN OPTION AGREEMENT IS EQUIVALENT TO HAVING PURCHASED RIGHTS TO THE SUBJECT INVENTION. SO IT WOULD BE CRITICAL TO GET AN EXPLICIT ANSWER TO THE QUESTION BELOW. THE LANGUAGE IN THE FOA SUGGESTS AN OPTION AGREEMENT SHOULD BE SUFFICIENT, WHILE THE LANGUAGE IN THE FAQ SUGGESTS IT MAY NOT BE – SINCE IT STATES "THE LICENSE IS REQUIRED BEFORE SUBMISSION OF A FULL APPLICATION" – IN ANSWER 13A. ANY CLARITY YOU CAN PROVIDE ON THIS ISSUE WOULD BE GREATLY APPRECIATED.

ANSWER: Please see FAQ 96.



Q98. WOULD YOU CONSIDER ALLOWING TEAMS CONSISTING OF SMALL BUSINESSES AND NATIONAL LABS TO QUALIFY FOR REDUCED COST SHARE EVEN THOUGH THE NATIONAL LABS RECEIVE MORE THAN 20% OF THE TOTAL FUNDS? NATIONAL LABS CANNOT PROVIDE COST SHARE, BUT THEY HAVE MANUFACTURING EXPERTISE THAT IS VERY HELPFUL FOR THE SCALEUP.

ANSWER: No. Please reference FOA Section III.C. "Cost Sharing."

Q99. I HAVE SOME QUESTIONS ABOUT PROJECT PLAN WORKBOOK.**FOLLOW-UP FUNDING**

- 1) DO PAID DEMOS GET LISTED ON BOTH THE DEMO SECTION AND THE FUNDING SUMMARY?
- 2) NATIONAL LABS WILL BE CO-INVESTIGATORS ON THE SCALEUP PROJECT. THEY HAVE ALREADY RECEIVED FUNDING TO HELP DEVELOP THE TECHNOLOGY. SHOULD THAT BE INCLUDED ON THE FOLLOW-UP FUNDING SECTION AND IF SO WHAT SHOULD BE INCLUDED?
 - A. THE SUBCONTRACT TO THE SMALL COMPANY (THE PROJECT LEAD)
 - B. THE AMOUNTS THAT THE NATIONAL LABS RECEIVED TO FURTHER DEVELOP THE TECHNOLOGY
 - C. THE AMOUNTS THAT THE NATIONAL LABS RECEIVED TO INTEGRATE THE TECHNOLOGY WITH THE LAB'S TECHNOLOGY

ON THE FINANCIAL PROJECTIONS

- 3) MY TEAM CONSISTS OF A SMALL BUSINESS AND A NATIONAL LABS. LARGE BUSINESSES WILL SERVE AS UNFUNDED COMMERCIALIZATION PARTNERS. IS IT CORRECT THAT THE FINANCIAL PROJECTIONS WILL BE ONLY FOR THE SMALL BUSINESS?
- 4) MY COMPANY IS PROFITABLE. HOW SHOULD NET PROFIT AFTER TAXES BE HANDLED IN THE BALANCE SHEET PROJECTIONS? SHOULD WE ASSUME THAT ALL OF THE NET PROFIT IS RETAINED, OR SOME OF THE PROFIT RETAINED AND SOME BE DISTRIBUTED TO SHAREHOLDERS?
- 5) ON INCOME PROJECTIONS DURING SCALEUP – DOES IT INCLUDE THE SCALEUP FUNDING OR WILL THAT BE SEPARATE?

ON THE ANTICIPATED FUTURE FUNDING NEEDS

- 6) I CAN ANTICIPATE FUTURE FUNDING NEEDS BUT I AM NOT READY TO MAKE A DECISION ON HOW THEY WILL BE FUNDED. I AM LEANING TOWARD FUNDING GROWTH THROUGH RETAINED EARNINGS OR LOANS RATHER THAN VC FUNDING. HOW SHOULD THAT BE HANDLED?
- 7) HOW WOULD I LIST FUNDING THAT WOULD COME FROM RETAINED EARNINGS?

ANSWER: 1. The preference is for deployments of the proposed SCALEUP technology that are complete (including paid or unpaid demos) to be listed in the 'Historical Deployments of Proposed SCALEUP Technology' table on the 'Original ARPA-E Project Info' tab of the Project Plan Workbook. If follow-on funding has been received to deploy the proposed SCALEUP technology, but the deployment is not

complete at the time of submission, include this information in the 'Follow-on Funding Since Original ARPA-E Award' section of the 'Funding Summary' tab.

2. Yes. Follow-on funding information (including that which is listed above) related to commercialization of the proposed SCALEUP technology/subject invention should be included in the 'Funding Summary' tab, regardless of who the recipient was.
3. Yes. The Financial Projections tab should only be completed for/by the lead organization of the Project Team.
4. Applicants should make the best assumptions possible, given individual circumstances/projections. If necessary, provide any relevant assumptions or clarifications in the 'Discussion of Financials' section.
5. Yes. The 'Income Statement Projections During SCALEUP' section should include the requested SCALEUP funding.
6. Applicants should indicate their anticipated future funding requirements (funding amounts or types) in the Workbook as accurately as possible as of the time of submission. It is understood that the anticipated funding needs and/or sources may change over time.
7. The 'Anticipated Future Funding Needs' section is intended to summarize additional external funding to support commercialization of the proposed SCALEUP technology/subject invention. Investment of retained earnings are not required to be listed in this section. Retained earnings projections are captured in the 'Financial Projections' tab, within the 'Balance Sheet Projections (with SCALEUP)' section. Applicants may choose to indicate in the 'Discussion of Financials' section if they intend to satisfy some/all additional future funding needs with those retained earnings.

Q100. I AM IN THE PROCESS OF PREPARING MY SUBMISSION FOR THE ARPAE SCALEUP 2021 FULL APPLICATION * REDACTED *** AND I HAVE A FEW QUESTIONS ABOUT THE 'REPLIES TO REVIEWER COMMENTS' REQUIREMENT MENTIONED IN THE FOA.**

SECTION IV.E SAYS "WRITTEN FEEDBACK ON THE FULL APPLICATION IS MADE AVAILABLE TO APPLICANTS BEFORE THE SUBMISSION DEADLINE FOR REPLIES TO REVIEWER COMMENTS".

- **WHEN WILL THE FEEDBACK BE AVAILABLE TO ME (THE APPLICANT)? I RECEIVED A LETTER OF ENCOURAGEMENT FOR OUR CONCEPT PAPER, BUT NOTHING FOR THE FULL APPLICATION.**
- **IS THIS SOMETHING WE WOULD NEED TO SUBMIT WITH OUR FULL APPLICATION OR AS A FOLLOW UP TO THE FULL APPLICATION AFTER 4/27 IF THE REVIEWERS NEED CLARIFICATION?**

ANSWER: You will receive feedback after the full application deadline but before the submission deadline for replies to reviewer comments.

Reply to reviewer comments are optional. Each Applicant may submit a Reply to Reviewer Comments in Adobe PDF format. This submission is optional. The Reply may include only the following: Up to 2 pages of text and up to 1 page of images.



Q101. AS PART OF OUR SCALEUP PROPOSAL, IF WE WILL BE MOVING TO A NEW SITE TO SUPPORT THE INSTALLATION OF EQUIPMENT CAN WE INCLUDE COSTS OF FINDING AND SECURING THE USAGE OF THE SITE AS WELL AS THE ADDITIONAL RENT OR OPERATIONAL COSTS THAT WILL BE INCURRED WITH A LARGER SITE? THE “CONSTRUCTION” TAB DID NOT SEEM TO COVER THIS FULLY.

ANSWER: They can be included if the costs are allowable, allocable, and reasonable and can be applied directly to the SCALEUP project.

Q102. ARE THESE TIMELINES ACCURATE AND A CONCEPT PAPER IS MANDATORY?

Announcement Type: **Initial Announcement Modification 1**
 Funding Opportunity No. DE-FOA-0002641
 CFDA Number 81.135

Timeline for SCALEUP:

Funding Opportunity Announcement (FOA) Issue Date:	December 16, 2021
First Deadline for Questions to ARPA-E-CO@hq.doe.gov :	5 PM ET, January 10, 2022
Submission Deadline for Concept Paper:	9:30 AM ET, January 20, 2022
Second Deadline for Questions to ARPA-E-CO@hq.doe.gov :	5 PM ET, April 15, 2022
Submission Deadline for Full Application:	9:30 AM ET, April 27, 2022

ANSWER: Yes, the posted deadlines are accurate. Any modifications to the FOA (including application deadlines) are posted to ARPA-E eXCHANGE. Please see FOA Section VII.E. Additionally, a Concept Paper submission is mandatory, see FOA Section IV.C.

Q103. WE ARE IN THE FINAL APPLICATION STAGE FOR AN ARPA-E FUNDING PROJECT PERTAINING TO A DYNAMIC MICROGRID CONTROLLER. WE HAVE A FEW QUESTIONS WE WERE HOPING COULD BE ANSWERED BY YOU.

FOR THE SCALEUP_2021_PROJECT_PLAN_WORKBOOK FILE DO WE NEED TO FILL THIS OUT IF WE HAVE NOT RECEIVED ANY FUNDING IN THE PAST FOR THIS PROJECT AND WE DO NOT HAVE A PRODUCT YET? IT SEEMS AS IF MOST OF THIS FILE APPLIES TO COMPANIES WHO HAVE HAD PAST FUNDING. THE OTHER QUESTION COMES FROM THE FINANCIAL PROJECTION SHEET, IS THIS FOR POTENTIAL PRODUCT REVENUE AND COGS OR FOR THE RESEARCH RESOURCES? WE ARE ASKING AS WE HAVE NO PROJECTED REVENUE OR COST FOR THE POTENTIAL PRODUCT THAT CAN COME FROM OUR RESEARCH.

ANSWER: All parts of the workbook that apply should be filled out. They are for both potential revenue and research resources.

Q104. MY TEAM IS SUBMITTING A FULL APPLICATION FOR ARPA-E SCALEUP 2022, INCLUDING THE 6-MINUTE VIDEO PITCH. BELOW ARE A FEW CLARIFYING QUESTIONS ABOUT THE USE OF THE VIDEO.

- 1) WILL THE VIDEO EVER BE SHARED PUBLICLY?**
- 2) IS THE VIDEO OBTAINABLE THROUGH THE FREEDOM OF INFORMATION ACT?**
- 3) HOW SHOULD WE MARK THE VIDEO AS CONFIDENTIAL?**

ANSWER:

1. No. See answer 2 below.,
2. No, but should be marked per answer 3 below. ARPA-E application records have never been released in response to a FOIA request without the written consent of the applicant. ARPA-E will use data and other information contained in submitted pitch videos – as with other application documents - strictly for evaluation purposes. ARPA-E protects from disclosure all marked confidential, proprietary, and privileged information pursuant to FOIA Exemption 4 (5 U.S.C. § 552(b)(4)).
3. Please include the following “Notice of Restriction on Disclosure and Use of Data” in your pitch video if you plan to share confidential, proprietary or privileged information and want to mark it as such: “This video consists of confidential, proprietary, or privileged information that is exempt from public disclosure. Such information shall be used or disclosed only for evaluation purposes or in accordance with a financial assistance agreement between the submitter and the Government..”

Q105. (REDACTED) IS PLEASED TO HAVE BEEN PROVIDED THE OPPORTUNITY TO SUBMIT A FULL APPLICATION IN RESPONSE TO ARPA-E SCALEUP 2021 FUNDING OPPORTUNITY ANNOUNCEMENT. IN REVIEWING THE OPPORTUNITY AND FOA REQUIREMENTS, (REDACTED) HAS DETERMINED THAT, SHOULD OUR PROJECT BE SELECTED FOR AWARD NEGOTIATIONS, IT WILL BE PREFERABLE TO PERFORM THE PROJECT OBJECTIVES WITHIN A NEW SPIN OUT COMPANY DEDICATED TO PRODUCING THE SUBJECT TECHNOLOGY. A NEW COMPANY WOULD PROVIDE EASIER OPPORTUNITY TO ACCEPT OUTSIDE INVESTMENT AND PROVIDE A FINANCIAL STRUCTURE THAT DIFFERS FROM (REDACTED) CURRENT DCAA-APPROVED ACCOUNTING SYSTEM. AS THE SPIN-OUT COMPANY HAS NOT BEEN CREATED (REDACTED) REQUESTS SUBMITTING THE PROPOSAL AS (REDACTED), BUT NEGOTIATING AND RECEIVING THE AWARD AS THE SPIN OUT COMPANY. PLEASE CONFIRM WHETHER (REDACTED) CAN SUBMIT THE FULL APPLICATION AS (REDACTED) BUT NEGOTIATE AND RECEIVE THE AWARD AS ANOTHER NEW ENTITY.

(REDACTED) BELIEVES THAT A SPIN OUT COMPANY WILL ALLOW FOR A BETTER TRANSITION TO PRODUCTION THEREBY MEETING BOTH (REDACTED) AND ARPA-E GOALS.

ANSWER: This is permissible. However, note that the “spin out” company would need to be established timely and meet all requirements for a financial assistance award. Failure to complete this

in a timely matter could impact the selection determination. Applicants should consider the tradeoffs of proposing such a “spin out” pre-award, or instead, later seek a post award transfer to a newly established, operational ‘spin out’ company.

Q106. I’M WRITING TO ASK CLARIFICATION REGARDING THE PROJECT PLAN WORKBOOK. SPECIFICALLY, IN THE FUNDING SUMMARY TAB – ARE WE TO IDENTIFY FUNDING RECEIVED ONLY RELATED TO THE PROJECT OR IF THE BUSINESS HAS RECEIVED FUNDING FOR OTHER PROJECTS SHOULD THAT BE INCLUDED?

ANSWER: Only this project.

Q107. WE ARE (REDACTED) AND WERE INVITED TO SUBMIT A FULL PROPOSAL (REDACTED). WE HAVE SEVERAL QUESTIONS BELOW:

- 1. ARE WE PERMITTED TO SHARE OUR CONCEPT PAPER SUBMISSION WITH OUR POTENTIAL AND CURRENT CUSTOMERS/COLLABORATORS WHO ARE UNDER NDA, IN SEARCH OF LOI COUNTERPARTIES?**
- 2. ARE WE PERMITTED TO MAKE ADJUSTMENTS TO THE PROJECT SCOPE IN THE FULL PROPOSAL RELATIVE TO WHAT WAS CONSIDERED IN THE CONCEPT PAPER? IF SO, HOW SIGNIFICANT CAN THOSE CHANGES BE?**
- 3. WILL ARPA-E PUBLISH THE LOIS? ARE THEY DISCOVERABLE?**
- 4. ARE WE PERMITTED TO SUBMIT A LARGER PROJECT WITH A BUDGET THAT CONTEMPLATES ADDITIONAL NON-FEDERAL AND NON-COST SHARE FUNDING?**
- 5. DOES ARPA-E REQUIRE ANY FORM OF COMMITMENT OR CONTRACT TO UNDERPIN THE LOIS? LETTERS OF INTENT ARE MORE FORMAL THAN LETTERS OF INTEREST OR LETTERS OF SUPPORT, AND IMPLY COMMITMENT.**

ANSWER:

1. Yes
2. Yes, as long as the scope isn’t changed drastically.
3. No – but should be marked appropriately: “CONFIDENTIAL PROPRIETARY DOCUMENT” or similar. See Answer 105.2 above
4. ARPA-E will not pre-assess applications.
5. Not at application phase.

Q108. I AM FILLING OUT THE SF-LLL FORM FOR THE SCALEUP 2021 SUBMISSION. SECTION 10A AND 10B ASKS FOR "LOBBYING REGISTRANT" AND "INDIVIDUAL PERFORMING SERVICES". CAN YOU TELL ME WHAT THESE TWO THINGS MEAN? CAN WE LEAVE IT BLANK IF NECESSARY?

ANSWER: Prime Recipients and Subrecipients are required to complete SF-LLL (Disclosure of Lobbying Activities) if any non-Federal funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of

Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with your application or funding agreement.

Q109. (REDACTED) IS PREPARING A PROPOSAL IN RESPONSE TO FOA DE-FOA-0002641 (SCALEUP 2021). CAN YOU PLEASE PROVIDE US WITH THE WORKBOOK TEMPLATE NEEDED FOR PERFORMING MULTIPLE RATE CALCULATIONS.

ANSWER: The indirect rate application template available on the ARPA-E website (<https://arpa-e.energy.gov/technologies/project-guidance/pre-award-guidance/required-forms-and-templates>) allows for up to 3 rates (Fringe, Overhead, and G&A.) If the performer would like to apply for additional rates they are welcomed to use the ICE Model provided by DCMA (DCAA > Customers > Checklists & Tools > ICE Model.) Performers may also use their own template as long as pools and bases are at a similar level of detail to the ARPA-E template.

Q110. THE TEMPLATE FOR THE COVER PAGE SAYS “ONE REPRESENTATIVE FIGURE IS REQUIRED, ILLUSTRATING THE PROPOSED TECHNOLOGY” IN OUR PREVIOUS ARPAE PROJECT WE DEVELOPED NOVEL ENERGY TECHNOLOGY. NOW WE ARE PROPOSING TO DEVELOP THE MANUFACTURING TECHNOLOGY TO DEPLOY AT SCALE.

SHOULD THE REQUIRED FIGURE ILLUSTRATE THE BASE TECHNOLOGY THAT WAS DEVELOPED PREVIOUSLY, OR THE MANUFACTURING TECHNOLOGY BEING DEVELOPED UNDER THE SCALEUP PROJECT?

ANSWER: The figure may be representative of the energy technology to be scaled or the manufacturing process being developed to support scaling in the proposed SCALEUP project.

Q111. WRT TO THE TEAM VIDEO – THE INSTRUCTIONS SAY TO “INTRODUCE THE PROJECT TEAM”. AS IN LITERALLY INTRODUCE KEY PLAYERS? DO YOU WANT TO SEE AND HEAR FROM PIS AND HEAR ABOUT THE REST OF THE TEAM IN GENERAL? SEE EVERYONE THAT WE INCLUDE IN THE PROJECT PROPOSAL BY NAME? HEAR ABOUT THE CORPORATE ENTITIES?

ANSWER: Applicants should address the content and requirements for the Team Pitch Video in Section IV.D.2 in the way they deem most appropriate in the context of the evaluation criteria included in Section V.A.1 of the FOA. Not all team members need to appear in the video, but the team introduction portion of the video should help communicate the knowledge, experience, and capabilities of key project participants in a way that demonstrates their ability to successfully execute the proposed SCALEUP project.

Q112. COULD THE TTO REQUIREMENT OR NON-REQUIREMENT FOR SCALEUP 2021 BE CLARIFIED?

THERE IS NO MENTION OF TTO IN THE SCALEUP 2021 FOA.

HOWEVER, IN THE PROVIDED SCALEUP TEMPLATE DOCUMENTS, THE BUDGET JUSTIFICATION WORKBOOK 'OTHER' TAB HAS SPECIFIC AND CONFLICTING INSTRUCTIONS REGARDING A TTO REQUIREMENT. (THIS WOULD BE VERSION 6.19 DATED 8/24/21).

THE BLACK TEXT IN THE FIRST PARAGRAPH OF THE INSTRUCTIONS ON THE 'OTHER' TAB REFER TO ALLOWABLE TTO ACTIVITIES FOUND IN SECTION IV.G.8 OF THE FOA. HOWEVER, THIS SECTION DOES NOT COVER TTO ACTIVITIES, NOR DO ANY OTHER SECTIONS OF THE FOA. THE RED TEXT OF THE SECOND PARAGRAPH OF THE INSTRUCTIONS IN THE 'OTHER' TAB STATE THAT APPLICANTS DO NOT NEED TO INCLUDE TTO ACTIVITIES AND DO NOT NEED A WAIVER TO DO SO. BUT THE BLACK TEXT IN THE 3RD PARAGRAPH STATES THAT APPLICANTS ARE REQUIRED TO CERTIFY THAT THEY HAVE MET THE 5% REQUIREMENT FOR TTO AND GOES ON TO MENTION THAT A WAIVER REQUEST CAN BE MADE.

THE 2ND AND 3RD PARAGRAPHS APPEAR TO BE IN CONFLICT WITH EACH OTHER AND IN CONFLICT WITH THE FOA WHICH IS SILENT ON TTO ALTOGETHER.

COULD ARPA-E ISSUE A CLEAR STATEMENT ON TTO AND PROVIDE AN UPDATED TEMPLATE DOCUMENT WITH NEW INSTRUCTIONS?

ANSWER: TT&O is NOT required, it is optional, but encouraged. Applicants may choose not to include TT&O activities if appropriate, and do not need a waiver to do so.

Q113. AS YOU ARE PROBABLY AWARE, THE OPEN TEAM WITH ADDITIONAL COMMERCIALIZATION PARTNERS IS PLANNING A SCALE-UP 2021 PROPOSAL. I WONDER IF THIS PROPOSAL REQUIRES A 'CHAMPION' FROM ARPA-E.

ANSWER: There are no "champions" from ARPA-E" for any applications for ARPA-E funding.

Q114. I'M PART OF A TEAM WHO HAS BEEN "ENCOURAGED" AT THE CONCEPT PAPER STAGE FOR ARPA-E SCALEUP.

A QUESTION ON FINANCIAL PARTNERS. THE FOA GIVES THIS DESCRIPTION:

"FINANCIAL PARTNER IS AN INVESTING ORGANIZATION WILLING TO PROVIDE THE APPLICANT WITH FUNDING FOR THE COST SHARE CONTRIBUTION TO THE PROJECT. FINANCIAL PARTNERS MAY INCLUDE VENTURE CAPITALISTS, ACCELERATORS/INCUBATORS, ANGEL/IMPACT INVESTORS, ETC. FINANCIAL PARTNERS TAKE ON INVESTMENT RISK WITH THE GOAL THAT THE TECHNOLOGY WILL BE SUCCESSFULLY PROVEN AND COMMERCIALIZED. FINANCIAL PARTNERS PROVIDE COST SHARE CONTRIBUTIONS WITHOUT ACTIVELY PARTICIPATING IN RESEARCH ACTIVITIES IN THE PROJECT."

WE RECENTLY RAISED VENTURE CAPITAL FUNDING. TWO VENTURE CAPITAL FIRMS WHO INVESTED ARE VERY SUPPORTIVE OF ALLOCATING THAT FUNDING TO THE COST SHARE PORTION OF THE ARPA-E SCALEUP PROJECT AND WOULD LIKE TO EXPRESS THIS IN A LETTER OF INTENT. IS IT OKAY TO INCLUDE LETTERS FROM THEM, EVEN THOUGH THE MONEY FOR THE PROJECT IS NOW WITH (REDACTED) AND WOULD BE DIRECTLY CONTRIBUTED BY (REDACTED) (I.E., IT WOULD NOT BE NEW INCREMENTAL FUNDING COMING IN FROM THEM FOR THE PROJECT)? WE BELIEVE IT WILL BE VALUABLE TO HAVE THE VOICES OF PRIVATE CAPITAL (AND HOW THEY VIEW OUR PROPOSED PROJECT) AS PART OF THE APPLICATION, BUT I WANT TO MAKE SURE THAT OUR APPLICATION IS IN LINE WITH WHAT WILL BE VALUABLE TO THE ARPA-E EVALUATORS.

ANSWER: Yes, such support letters are permitted.

Q115. I HAVE THE FOLLOWING QUESTION REGARDING A FULL APPLICATION FOR SCALE-UP.

- DO ALL TEAM MEMBERS (I.E. THE INDIVIDUAL COMPANIES / AGENCIES PARTICIPATING IN OUR PROJECT) NEED TO SUBMIT SEPARATE BUDGET JUSTIFICATION WORKBOOKS?**

ANSWER: No, it should all be included in the one workbook.

Q116. IN LIEU OF A QUOTATION WOULD INDUSTRY STANDARD COST ESTIMATION PRACTICES, SUCH AS THE METHODS IN THE TEXTS "ANALYSIS, SYNTHESIS, AND DESIGN OF CHEMICAL PROCESSES" BY TURTON ET AL., "PROCESS EQUIPMENT COST ESTIMATION FINAL REPORT" BY LOH. ET AL., AND "RULES OF THUMB IN ENGINEERING PRACTICE" BY WOODS ET AL., BE AN ACCEPTABLE APPROACH FOR GENERATING AND SUPPORTING EQUIPMENT COST BASIS FOR A PILOT FACILITY?

ANSWER: ARPA-E generally requires a quotation to justify equipment costs.

Q117. IF A SMALL BUSINESS IS LEADING A PROPOSAL, WHICH QUALIFIES THEM FOR A REDUCED COST SHARE REQUIREMENT OF 20%, AND THEY WILL PERFORM GREATER THAN OR EQUAL TO 80%, CAN A LARGE BUSINESS QUALIFY FOR THE REDUCED COST SHARE REQUIREMENT?

ANSWER: 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 Concept Paper or Full Application. See ARPA-E General FAQs 4.8 and 4.9.

Q118. A BUDGET QUESTION FOR SCALEUP:

- 1) ARPA-E GENERALLY REQUIRES THE PROPOSALS TO INCLUDE 5% OF THE FUNDS FOR TT&O. IS THIS REQUIRED FOR SCALEUP?**
- 2) IS TT&O FUNDING ALLOWED UNDER SCALEUP? I REALIZE THAT YOU ALLOW \$50K OF PATENT CHARGES, AND TRAVEL TO THE SUMMIT, BUT ARE OTHER CHARGES ALLOWED?**
 - I. PRESENTATIONS AT OTHER MEETINGS?**
 - II. MARKETING EXPENSES THAT ARE ALLOCATABLE INCLUDING PERSONNEL CHARGES & TRAVEL?**

ANSWER:

- 1) See answer to question 112 above.
- 2) TT&O is allowed and encouraged.

Q119. WE HAVE A QUESTION REGARDING THE PROJECT PLAN WORKBOOK. ON THE 2ND TAB "SCALING PROGRESS & TARGETS", WE ARE WONDERING IF THE METRICS NEED TO RELATE TO THE ORIGINAL ARPA-E TARGETS? FOR EXAMPLE, OUR ORIGINAL ARPA-E HELPED US ADVANCE KEY UNDERPINNINGS OF OUR TECHNOLOGY (I.E., PERFORMANCE). THEREFORE, THE ORIGINAL ARPA-E METRICS WERE ABOUT SUCCESSFULLY PROVING AN IDEA.

OUR SCALEUP PROPOSAL RELATES MAINLY TO SCALING UP THE PRODUCTION OF THE TECHNOLOGY, RATHER THAN THE ORIGINAL ARPA-E METRICS (I.E., PERFORMANCE). WE WOULD THEREFORE LIKE TO LIST SCALEUP PROJECT METRICS THAT ARE RELATED TO SCALING PRODUCTION OF A TECHNOLOGY WHICH WOULD NOT BE INLINE WITH OUR ORIGINAL ARPA-E METRICS RELATED TO PERFORMANCE.

- **WOULD THIS APPROACH BE INLINE WITH THE FOAS INTENTIONS?**
- **DO WE LEAVE METRICS FOR COLUMN D (TARGET FOR ORIGINAL ARPA-E PROJECT) AND COLUMN E (STATUS AFTER ORIGINAL ARPA-E PROJECT) BLANK IF WE ARE USING NEW AND UNRELATED METRICS?**

ANSWER: This would be an acceptable approach.

Q120. WOULD YOU CONSIDER ALLOWING TEAMS CONSISTING OF SMALL BUSINESSES AND NATIONAL LABS TO QUALIFY FOR REDUCED COST SHARE EVEN THOUGH THE NATIONAL LABS RECEIVE MORE THAN 20% OF THE TOTAL FUNDS? NATIONAL LABS CANNOT PROVIDE COST SHARE, BUT THEY HAVE MANUFACTURING EXPERTISE THAT IS VERY HELPFUL FOR THE SCALEUP.

ANSWER: 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 Concept Paper or Full Application.

Q121. THE TWO LEVELS ARE 33.3% AND 20%. WE WANTED TO FIGURE OUT IF 90% OF THE WORK WAS A SMALL BUSINESS AND A UNIVERSITY, WOULD THIS BE 33.3% OR 20%?

ANSWER: 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 Concept Paper or Full Application.

Q122. IN RELATION TO THE ABOVE FOA, IS ANY GUIDANCE AVAILABLE ON THE TYPE OF BUSINESS DOCUMENTS THAT WOULD BE ACCEPTED IN SECTION 9 OF THE TECHNICAL VOLUME (REFERENCES AND BUSINESS DOCUMENTS)?

ANSWER: General guidelines can be found at [General Questions | arpa-e.energy.gov](https://arpa-e.energy.gov/General-Questions).

Q123. WE ARE PREPARING OUR APPLICATION FOR THIS FOA AND HAVE FEW QUESTIONS

- **CAN WE PROPOSE SMALLER AND LARGE SCALE DEMONSTRATIONS OR OUR PROPOSED UNIT UNDER THIS FOA**
- **CAN THIS FOA BE USED TO PROPOSE A PROCESS TO STREAMLINE AND SCALE THE MANUFACTURING PROCESS OF THE DEVICE WE DEVELOPED UNDER OUR CURRENT ARPAE PROGRAM**

ANSWER: As stated in Section II.A of the FOA, “ARPA-E seeks Applications for projects that have progressed beyond proof-of-concept and need to demonstrate scalability, reliability, and domestic manufacturability”. Refer to the FOA for additional details.

Q125. THE PROJECT PLAN WORKBOOK ASKS FOR CONFIDENTIAL INFORMATION. HOW DO I MARK IT CONFIDENTIAL?

ANSWER: Please refer to FOA Section VII.I. Information in the Project Plan Workbook will be treated the same as other information required as part of the Full Application. ARPA-E will use the data strictly for evaluation purposes. Additionally, ARPA-E’s authorization statute permits the agency to protect applicants’ commercial and financial information from public disclosure. (<https://arpa-e.energy.gov/about/authorization>) See “The America Competes Act”, 42 U.S.C. § 16538(n) (2018) (as amended in 2018 by Pub. L. No. 115-246) (“Competes Act”).

Q126. I AM SUBMITTING THIS EMAIL TO REQUEST THAT THE FULL PROPOSAL SUBMISSION DEADLINE FOR SCALEUP BE EXTENDED BEYOND THE CURRENT 5/27/2022 DATE. APRIL IS ONE OF THE MAIN MONTHS FOR CONFERENCES IN THE ENERGY SECTOR AND THIS DOES NOT LEAVE MUCH TIME FOR SMALLER COMPANIES TO BRING TOGETHER A FULL PROPOSAL.

ANSWER: ARPA-E intends to maintain the current submission deadline for Full Applications, which is 4/27/2022 at 9:30am ET.