

## QUESTIONS AND ANSWERS

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The online ARPA-E eXCHANGE "Funds and Costs" tab asks for Federal and Non-Federal Share of Cost, but does not specify if this would be for the System Capital Costs or the R&D project scope of work associated project costs.....8

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Q24. We are just verifying: The first step is a Concept Paper, with instructions found on pages 31-34. There is a requirement for a cost table specific to the operating cost of the proposed system. HOWEVER, we do not find a requirement to provide a ROM, estimate, or any financial representation of the proposal cost. We believe that this is intentional so that assessment of the concept is not influenced by the project costs.....8

There is no requirement to provide an estimate of the project cost as part of the concept paper? .....8

Q25. I have two questions:.....8

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2) I have interpreted the Concept Paper instructions to allow for figures, tables, charts, etc. to appear in the technology description section I, but that the addendum section III can include any additional figures, tables, charts, etc. deemed necessary. ....9

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Agency). The FOA only states "Funding agreements with non-DOE/NNSA FFRDCs, GOGOs, and Federal instrumentalities (e.g., Tennessee Valley Authority) generally take the form of Interagency Agreements." It is not clear if this includes other Federal Agencies per the definitions of the terms. MY OGC also is evaluating the option of a CRADA for this funding but that decision may not occur until after we submit the proposal... 15

Q47. We have never proposed a Cost Share before and we want to make sure we are understanding it correctly. Can we arrange a phone conversation with you to clarify the rules? Please let us know if you are available for a call this week to clarify the cost share rules..... 16

Q48. There are a few problems with the required Budget Justification form SF424a that is attached to the package for DOE-FOA-0001128 MONITOR proposal applications. .... 16

1) The fringe benefit tab - there is no place to put dollar figures for personnel - you can only enter the fringe benefit rate (%). There are no calculations on that page and nothing from the fringe benefit tab is linked to the budget summary page. .... 16

ANSWER: Only percentages and bottom line dollar values are requested in the table. Additional detail and calculations may be provided in the explanations/comments/ calculations /formula box listed below the table. Because different organizations have different rate calculations and methods for application, there is no linkage to other sheets, except the 'Instructions and Summary' sheet. .... 16

2) The indirect cost tab has the same issues as the fringe benefit tab. No place to put direct costs - can only enter the F&A rate (%). And no information is linked to the budget summary page..... 16

ANSWER: Only percentages and bottom line dollar values are requested in the table. Additional detail and calculations may be provided in the Explanations/Comments/Calculations/Formula Box listed below the table. Because different organizations have different rate calculations and methods for application, there is no linkage to other sheets, except the 'Instructions and Summary' sheet. .... 16

3) The entire form is password protected so you can't fix the errors..... 16

ANSWER: The Budget Justification – SF-424A Workbook is a protected document so ARPA-E can ensure consistency in budgetary calculations from applicants. .... 16

4) There are also links in the workbook that cannot be updated as the source (Jason's budget justification.xlsx) is not found. .... 17

I. FREQUENTLY ASKED QUESTIONS:

**Q1. If I have questions about this funding announcement, who do I contact?**

**ANSWER:** Please see the FOA guidance on submitting FOA content questions and response publication. Applicants may submit questions regarding this ARPA-E's Funding Opportunity Announcement (FOA) to [ARPA-E-CO@hq.doe.gov](mailto:ARPA-E-CO@hq.doe.gov). All emails must include the FOA name and number in the subject line. The cover page and Executive Summary of the Funding Opportunity Announcement state the deadlines for submitting questions to [ARPA-E-CO@hq.doe.gov](mailto:ARPA-E-CO@hq.doe.gov).

**Q2. How will I receive a response to questions submitted to ARPA-E-CO@HQ.DOE.GOV about this FOA?**

**ANSWER:** Responses are posted in the "Frequently Asked Questions" section of ARPA-E's website. There are general FAQs and a FAQ page for each FOA.

ARPA-E will post responses on a weekly basis to any questions that are received.

ARPA-E will cease to accept questions approximately 5 business days in advance of each submission deadline. Responses to questions received before the cutoff will be posted approximately one business day in advance of the submission deadline. ARPA-E may re-phrase questions or consolidate similar questions for administrative purposes.

**Q3. Will ARPA-E post a response to every question submitted to ARPA-E-CO@HQ.DOE.GOV?**

**ANSWER:** No. ARPA-E will only post responses to questions that have not already been addressed by a published FAQ. Also, ARPA-E may consolidate similar questions for administrative purposes.

**Q4. If I have questions about ARPA-E exchange, who do I contact?**

**ANSWER:** Applicants may submit questions regarding ARPA-E's online application portal, ARPA-E eXCHANGE, to [ExchangeHelp@hq.doe.gov](mailto:ExchangeHelp@hq.doe.gov). All emails must include the name and number of the Funding Opportunity Announcement in the subject line.

**Q5. Can I speak or meet with the ARPA-E program director or other ARPA-E personnel about this funding opportunity announcement?**

**ANSWER:** No. Upon the issuance of this Funding Opportunity Announcement (FOA), ARPA-E Programs and other ARPA-E personnel are prohibited from communicating (in writing or otherwise) with Applicants, or potential Applicants, regarding the FOA. This "quiet period" remains in effect until ARPA-E's public announcement of its project selections. During the "quiet period," Applicants may submit questions regarding the FOA to [ARPA-E-CO@hq.doe.gov](mailto:ARPA-E-CO@hq.doe.gov) with the FOA name and number in the subject line. Applicants may also submit questions regarding ARPA-E's online application portal, ARPA-E eXCHANGE, to [ExchangeHelp@hq.doe.gov](mailto:ExchangeHelp@hq.doe.gov) with the FOA name and number in the subject line. ARPA-E will not accept or respond to communications received by other means (e.g., fax, telephone, mail, hand delivery). Emails sent to other email addresses will be disregarded.

**Q6. Can a person be PI on one proposal and a Co-PI on a second separate proposal?**

**ANSWER:** Yes, but the applications must be scientifically distinct from one another.

**Q7. May applicants submit more than one Concept Paper to this funding opportunity?**

**ANSWER:** Yes, but each Concept Paper submission must be scientifically distinct.

**Q8. I have developed a technology that may be a good fit for this funding opportunity. Will ARPA-E please review the attached project information and let me know if I should make a submission to this funding opportunity?**

**ANSWER:** No. Applicants must review the Technical Requirements of this funding opportunity announcement to determine if their technology warrants a submission to ARPA-E. See e.g. Section I.D (“Technical Categories of Interest”) and Section I.F (Applications Specifically Not of Interest) of the FOA.

## II. Questions for week ending: MAY 9, 2014

**Q9. With regard to proposed sensing systems, the MONITOR FOA says on page 7: “Each of these would require not only the physical sensing component (laser spectrometer, catalytic sensor, imaging sensor, biological sensor), but also wind data (speed, direction) and potentially other weather data (temperature, precipitation).”**

**Is wind data actually required, or are other means of estimating the location and magnitude of the leak responsive?**

**ANSWER:** ARPA-E has revised Section I.B.4 of the FOA to read as follows:

“Each of these would require not only the physical sensing component (laser spectrometer, catalytic sensor, imaging sensor, biological sensor), but also environmental data (e.g., wind speed and direction) and potentially other weather data (e.g., temperature, precipitation). The concentration and environmental/weather data would be used with an inverse dispersion model to estimate the location and magnitude of a leak. Please note that use of specific environmental and weather data is not required; all data-based methods of estimating the location and magnitude of a leak are acceptable.”

**Q10. Section 2 "Target Facility" states 10x10m well pad as model test facility.**

**I'm part of a concept involving various mobile platforms with sensors. There is worry we're not responsive - for example, why not just inundate the well pad with inexpensive stationary sensors?**

**Can I assuage worries by recognizing that some models need to be chosen, as the text says, to bound an extremely diverse problem and that proposals that use highly-accurate mobile sensors are responsive to the call?**

**ANSWER:** There are many possible approaches towards meeting the objectives of the FOA. ARPA-E encourages a diversity of approaches.



**Q11. Several folks have asked for the name(s) and contact information of the Program Director(s) for the new FOAs. Will you please provide this information or direct me to the location on your website that provides this information.**

**ANSWER:** Please see question 5 above.

**III. Questions for week ending: JUNE 6, 2014**

**Q12. Can NETL participate in the MONITOR FUNDING OPPORTUNITY**

**ANSWER:** No. Per Section III.A.2 of the FOA, DOE/NNSA Government-Owned, Government Operated laboratories (GOGOs) are not eligible to apply for funding.

**Q13. Can Federal Employees be listed on the Teaming partner list as potential Collaborators?**

**ANSWER:** Per section III.A.2 of the FOA, federal agencies and instrumentalities (other than DOE) and Non-DOE/NNSA GOGOs are eligible to apply to the MONITOR FOA as a member of a Project Team, but not as a Standalone Applicant or as the lead organization for a Project Team. Federal employees representing eligible federal entities may thus be listed on the teaming partner list as potential collaborators.

**Q14. Do the annual compliance audit requirements of 10 c.f.r. 600.316 apply to for-profit subrecipients under ARPA-E awards?**

**ANSWER:** No. The annual compliance audit requirement in 10 C.F.R. 600.316 applies only to Prime Recipients under ARPA-E awards and does not flow down to Subrecipients.

**Q15. Can you please comment as to whether the cost of explosion proof housing needs to be taken into account relative to the use of sensors in or on the test platform?**

**ANSWER:** All components that are required for the operation and implementation of the sensor in the field need to be factored into the sensor system cost.

**Q16. I am having a hard time finding the Business Assurance Form referenced in the MONITOR FOA. Could you please help direct me to that document?**

**ANSWER:** ARPA-E's Business Assurances Form is not available in ARPA-E eXCHANGE for the Concept Paper stage of the MONITOR FOA. Once the Full Application stage updates to the FOA are posted in eXCHANGE, ARPA-E will post the Business Assurances Form in eXCHANGE along with other Full Application forms and materials.

**Q17. We are submitting the following questions:**

**1. Will there be any defined vertical structure that should be considered in assessing potential leak locations? This could matter for the sensing strategies.**

**ANSWER:** No vertical structures are predefined.

**2. Is it allowable to amortize a sensor system over a number of sites (PADS) that it measures over the course of the year?**

**ANSWER:** As stated in Section I.C, Page 9 of the FOA: “[S]ensors for use in mobile sensing (from ground vehicles, airplanes, UAVs, etc.) may require high sensitivity **but may be able to tolerate higher sensor costs since the system allows measurement of multiple sites.**”

**3. Is there any limitation on using international suppliers for sensors and other equipment?**

**ANSWER:** Under Clause 9 of Attachment 1 to ARPA-E's Model Cooperative Agreement (available at <http://arpa-e.energy.gov/arpa-e-site-page/award-guidance>), new equipment acquired under an ARPA-E award must be made or manufactured in the United States, to the maximum extent practicable. This requirement does not apply to used or leased equipment. Acquisition of new equipment made or manufactured outside of the United States will be considered on a case-by-case basis.

**4. Is there a preference for commercialization plans focused on sensors and equipment as opposed to system integration or even services? Also is there a preference for small businesses?**

**ANSWER:** No. There is no preference for either.

**5. To what degree can we allow for wind direction fluctuations, as needed to sample well the full well pad area from a small number of fixed sensors?**

**ANSWER:** As stated in Section I.C, Page 8 of the FOA: “A square production well pad has been chosen as the ‘model site,’ with dimensions of 10 meters by 10 meters; leakage is possible from anywhere on the site, and **time varying winds of 2.75 m/s (average wind speed) are typical. For systems that depend on or are affected by wind, the reference wind profile chosen for this analysis is a 2 meter data set (taken 2 meters above ground) from the National Wind Technology Center.**” For additional information, see the reference if footnote 14, which contains the wind profile assumed.

**6. Will human operators be allowed elements of the sensing system?**

**ANSWER:** A human operator can be used for installation and calibration, but ultimately, the system must be capable of operating unattended.

**Q18. We have the following questions:**

**1. Would tests of the proposed MONITOR system at additional sites, beyond the model well-head site described in the FOA, be permitted or valued as a part of the funded effort? Is the model well-head an existing facility or just a paper example site?**

**ANSWER:** Please see Question 17.2 above.

**2. Are the model leaks used in estimating the required reductions assumed to be randomly distributed in time, but not intermittent? That is, once a leak develops, it remains a leak until it is actively repaired?**

**ANSWER:** Yes, the model will assume that once a leak develops it remains leaking until repaired.

**3. If model leaks are intermittent, such as due to certain operations, is there guidance about leak rate and duration of interest?**

**ANSWER:** For simplicity, intermittent leaks will not be included in the model or in ARPA-E's evaluation of concepts.

**4. Section I.B.4 "Program Approach" describes seven potential measurement solutions and then states "Each of these would require .... also wind ... and weather data. The concentration and wind/weather data would be used with an inverse dispersion model to estimate the location and magnitude of a leak". In contrast, the opening paragraph of Section I.C "Program Objectives" states: "The specific objective is to detect and measure methane leaks as small as 1 ton per year ....". Questions: Is the objective to detect leaks and quantify the leak rate (i.e. mass flux) or is it to measure a concentration (which does not yield a leak rate?). If the former can be accomplished without wind, weather, and concentration (e.g. ppm) data, would it be an acceptable solution?**

**ANSWER:** The objective is to detect a leak and quantify the mass flow rate of the leak.

**5. Are there aspects to the meaning of "data quality control" other than maximizing detection while minimizing false alarms?**

**ANSWER:** No, there are no other aspects to "data quality control."

**6. Section V.A.1 “Criteria for Concept Papers” includes as part of the evaluation “The extent to which project outcomes and deliverables are clearly defined; and a strong and convincing technology development strategy including a feasible pathway to transition program results”. However, the description of the Concept Paper Contents (Section 7.C) does not include any discussion of these criteria nor space within the two page limit for significant discussion. Is the intent to include this information in the Appendix?**

**ANSWER:** The Applicant can incorporate that information wherever most appropriate in the Concept Paper. While important in the Concept Paper, the project outcomes and deliverables and technology development strategy can be more thoroughly detailed (and evaluated) in the Full Application stage.

**Q19. Section VIII.E of the FOA states that the cover sheet of the Concept Paper must be marked with a specific notice concerning confidentiality, proprietary, and privileged information. Does inclusion of this cover sheet count towards the page limit for Concept Papers?**

**ANSWER:** Applicants may include a separate cover sheet. The cover sheet will not count against the page limit.

**Q20. I am a foreign national working for a U.S. University in a nonimmigrant visa status. Am I eligible to apply to this FOA?**

**ANSWER:** Per Section III.A.1 of the FOA, only U.S. citizens or permanent residents may apply to the FOA in their individual capacities. However, domestic educational institutions are eligible to apply for funding as a Standalone Applicant, as the lead organization for a Project Team, or as a member of a Project Team. Principal Investigators representing such institutions need not be U.S. citizens or permanent residents.

**Q21. We are trying to estimate how the pricing of the system is calculated in the solicitation such as TDLAS and CRDS on Page 7.**

The solicitation mentions: "Current high-resolution methane measurement approaches (e.g.; cavity ring-down, TLDAS) have initial capital costs of \$75,000-\$100,000".

---Our question is, when you mention cost of \$75K-\$100K, is it the cost of monitoring just one well-head or for multiple well-heads in a certain geographical area and if multiple, how many such well-heads?

--The main component cost of the system we envision is the optical source. Other components are very cheap. Assuming that the optical source costs \$40K, if the same source can be used to monitor 20 well-heads, would we meet the pricing requirements by saying that the contribution to each well-head is only \$2000, (assuming that other costs are lower)?

**ANSWER:** Please see Question 17.2 above.

**Q22. My company would like to learn more about the funding opportunity and discuss whether its research topic is in line with ARPA-E's program focus. What is the process for connecting with the program manager to further discuss our proposal?**

**ANSWER:** Please see question 5 above.



**Q23. Regarding DE-FOA-0001128 Concept Paper Cost Table required Information:**

In the solicitation, Cost Table instructions specify that cost breakdown should include the systems capital cost, annual operating cost, and system life that would be combined to estimate the annual cost of measurement. The Cost Table instructions do not state that the submitter needs to define the costs to complete the proposed R&D project scope of work and tasks.

The online ARPA-E eXCHANGE “Funds and Costs” tab asks for Federal and Non-Federal Share of Cost, but does not specify if this would be for the System Capital Costs or the R&D project scope of work associated project costs.

Please clarify if R&D project scope-of-work cost estimates are also required to submit in the Concept Paper stage, and if these costs are to be submitted in the ARPA-E eXCHANGE “Funds and Costs” tab.

**ANSWER:** The “Funds and Costs” tab in ARPA-E eXCHANGE requests proposed federal funding and cost share for completion of the proposed research and development project. Per IV.C of the FOA, please include information concerning system costs in a cost table in the Concept Paper.

**Q24. We are just verifying: The first step is a Concept Paper, with instructions found on pages 31-34. There is a requirement for a cost table specific to the operating cost of the proposed system. HOWEVER, we do not find a requirement to provide a ROM, estimate, or any financial representation of the proposal cost. We believe that this is intentional so that assessment of the concept is not influenced by the project costs.**

**There is no requirement to provide an estimate of the project cost as part of the concept paper?**

**ANSWER:** See question 23 above.

**Q25. I have two questions:**

**1) Are we allowed to assume that there is access to electrical power on an oil well pad, or must all total solutions be self-powered?**

**ANSWER:** For purposes of the Concept Paper, it is reasonable to assume access to electrical power, but this will require further consideration for a Full Application. Some well pads have access to AC power from the grid, but this is not universal. For locations where AC power is not available, well pad operation is typically supported by solar photovoltaics with battery backup;

this could be an issue if a proposed solution has a high power requirement. Additional guidance on power availability will be provided in instructions for the Full Application.

**2) I have interpreted the Concept Paper instructions to allow for figures, tables, charts, etc. to appear in the technology description section I, but that the addendum section III can include any additional figures, tables, charts, etc. deemed necessary.**

**Is that correct, or are you actually requesting that all such matter appear in the addendum ?**

**ANSWER:** The Applicant can include figures, tables, and charts wherever they deem most appropriate in the Concept Paper submission, subject to the content and form requirements and page limitations stated in Section IV.C of the FOA.

**Q26. Does the Concept Paper need to provide the proposed effort's total cost ... ROM budget info, etc.? (I cannot find that requirement in the instructions...but want to make certain that leaving it out is OK)**

**ANSWER:** See question 23 above.

#### IV. Questions for week ending: AUGUST 15, 2014

**Q27. Has there been any schedule updates related to the methane monitoring FOA?**

**ANSWER:** Please see the cover page of the most recent Funding Opportunity Announcement document (Modification 03) posted on ARPA-E eXCHANGE (<https://arpa-e-foa.energy.gov/>) for the latest schedule and deadlines.

**Q28.A. I originally submitted my concept paper through \*\*\*\*[organization name 1]. I am also affiliated to \*\*\*\* [organization name 2]. can I switch the lead organization in my full Application to \*\*\*\* [organization name 2]?**

**ANSWER:** Yes, the ARPA-E eXCHANGE system will allow applicants to expand or otherwise modify the Project Team for their Full Applications.

**Q28.B. Can I include additional Co-PIs in my full application?**

**ANSWER:** Yes. Applicants may expand or otherwise modify the Project Team for their Full Applications.

**Q29. I noticed that there was a modification of the MONITOR FOA (DE-FOA-0001128). I missed the last Concept Paper deadline. Has ARPA-E extended the due date to submit the Concept Paper and can I submit a full proposal?**

**ANSWER:** No. Only applicants who have successfully submitted a Concept Paper in Exchange by the published deadline are eligible to submit a Full Application to the FOCUS FOA (DE-FOA-0000949). In addition, eligible applicants may only submit applications through the ARPA-E funding opportunity Exchange website <http://ARPA-E-FOA.energy.gov>

**Q30. Is a Prime Applicant permitted to submit a Concept Paper for Category 1 Technical Area of Interest and then submit a Full Application for Category 2 Technical Area of Interest?**

**ANSWER:** Yes, if the Category 2 (Partial Measurement Systems) Full Application submission is based, in whole or in part, on the applicant's Category 1 (Complete Measurement Systems) Concept Paper submission.

**Q31.A. Pages 9-10 of the FOA indicate that facilities targeted for deployment are of all sizes, while the "model site" specified on page 10 of the FOA is a 10m x 10m well pad. Is the 10m x 10m well pad still the focus of the FOA for the full proposal or is the focus now for facilities of all sizes?**

**ANSWER:** The 10m X 10m square production well pad is still the focus of the FOA. Please see Section I.C.2 (Target Facility) of the FOA for more information on the model site.

**Q31.B. Page 10 of the FOA states: "Details about the model site and additional criteria will be provided in the instructions for Full Applications." We were not able to find any additional details on the model site in the FOA, are there any other documents besides the FOA that we should review?**

**ANSWER:** ARPA-E determined that, to avoid any potential constraints on obtaining the most innovative applications to address the essentials goals of the MONITOR FOA, that no additional details or criteria for the model site were necessary or appropriate.

**Q31.C. The model site was described as a 10 m x 10 m well pad, but there was no vertical dimension specified. Is there a maximum height at which the leaks can be assumed to originate?**

**ANSWER:** No. The 10m X 10m square production well pad dimensions refers only to the X and Y directions of the model site. Applicants may, but are not required, to include estimates of the height (Z coordinate) of the origin of a leak in the Full Application.

**Q31.D. In terms of scaling the solution, Does the \$3k/year cost target apply only to the 10m x 10m area of a site (as defined in technical goals), or does it also apply to a site regardless of its dimensions?**

**ANSWER:** The total system cost identified in Section I.E (Technical Performance Targets) of the FOA applies only to the 10m X 10m square production well pad ("model site"). For describing the scalability risks associated with a technology in the Technology-to-Market Strategy of the Technical Volume, it is understood that a large complex site (i.e. compressor station, gas processing plant) can tolerate a higher cost than a 10m x 10m well pad. If there are significant economies of scale, these can be noted in the proposal, but the cost analysis for the proposal should focus on the well pad.

**V. Questions for week ending: AUGUST 22, 2014**

**Q32. The HQ/Operations Office Program Manager name is a required field on the Field Work Proposal required in the business assurances form. How can I find out the Program Managers names?**

**ANSWER:** Applicants may enter “TBD” in this field. As provided in the instructions for Section 8 (Field Work Proposal) of the Business Assurances & Disclosures Form, applicants should refer to the DOE Work Proposal instructions included in DOE O 412.1A, “Work Authorization System” available at <https://www.directives.doe.gov/directives-documents/400-series/0412.1-BOrder-a/view> for guidance on completing Field Work Proposals.

**Q33. Our implementation is novel, and can quite easily be submitted as either a complete or partial solutions, and there are good arguments for going either way. The FOA indicates a complete solution is preferable, however, a partial solution is acceptable. Are the chances of being selected for a partial solution lower than for a complete solution?**

**ANSWER:** ARPA-E will not provide a pre-submission assessment of an Applicant’s likelihood to receive funding under a particular category for the MONITOR FOA.

**VI. Questions for week ending: AUGUST 29, 2014**

**Q34. I want to make sure that we did not miss this explicit requirement in the FOA for the ability of a system to detect methane vertically (eg, at 100 feet elevation). Please point me to the detailed requirement for detection in the vertical direction in the FOA, or provide supplemental specifications, so that we can make certain that our full proposal directly addresses any concerns**

**ANSWER:** Please see the answers for Question 31.C and Question 17, Part 1 above.

**Q35. Our project team includes a domestic non-profit and a small business that will each receive ARPA-E funds and large business that will provide labor and access to specialized equipment as “in-kind” contributions. The non-profit will perform 80% of the work using ARPA-E funding, and the small business 20% of the work using ARPA-E funding. The for-profit company will provide labor and access to specialized equipment as in kind contributions to cover the cost share. Under this arrangement, is it correct to assume that the for profit needs to provide enough labor and/or equipment to cover cost share at 10% of the project cost Or does the for-profit’s labor count toward the total project labor and put the team into the category requiring 20% cost share? If the cost share is provided as cash only, does the team stay at the 10% cost share requirement?**

**ANSWER:** ARPA-E may not provide pre-submission assessments on a project team’s specific cost sharing requirement. To qualify for reduced cost share of 10%, domestic educational institutions, domestic nonprofits, and/or FFRDCs must perform greater than or equal to 80%, but less than 100%, of the total work under the funding agreement (as measured by the Total Project Cost). Cost Share is calculated as a percentage of the Total Project Cost, which is the sum of the Prime Recipient share (including all efforts carried out by subrecipients or “consultants”) and the Federal Government share of total allowable costs. All work or contributions towards the project, even if provided “in-kind” by a subrecipient to the project or not reimbursed by ARPA-E, would count toward the percentage of work calculation to determine the minimum cost share requirement for the project as a whole. Please see Section III.B.3 (Reduced Cost Share Requirement) of the FOA for more details on the cost sharing requirements for this FOA.

**Q36. A domestic non-profit will perform 80% of the work on our project. The team will also include a small business and a large business that will each perform 10% of the work. The large business will ask to receive patent rights under a class waiver. Does this mean the entire project is subject to 20% cost share or a reduced cost share of 10% for the work performed by the company requesting a patent waiver?**

**ANSWER:** ARPA-E may not provide pre-submission assessments on a project team’s specific cost sharing requirement. Per Section II.B.3 (Reduced Cost Share Requirement) of the FOA, only the entity receiving patent rights under a class waiver that is part of a project Team receiving a cost sharing reduction of 10% must continue to meet the statutory minimum cost share requirement (20%) for its portion of the Total Project Cost. Please see Section III.B.3 (Reduced Cost Share Requirement) of the FOA for more details on the cost sharing requirements for this FOA.

## VII. Questions for week ending: SEPTEMBER 5, 2014

**Q37. Can a professor's salary be considered an in-kind contribution?**

**ANSWER:** All cost share contributions must be allowable under the applicable Federal cost principles to be counted towards meeting the cost share requirement. Please see Section III.B.6 (Cost Share Types and Allowability) and Section IV.G.1 (Funding Restrictions – Allowable Costs) of the FOA for more information on allowability of in-kind cost share contributions.



**VIII. Questions for week ending: SEPTEMBER 12, 2014**

**Q38.A We didn't find where literature references should be located, can we put these into a separate (not page-limited) section?**

**ANSWER:** Literature references should be included in the R&D Strategy of the Technical Volume which is limited to 15 pages. Please see Section IV.D (Content and Form of Full Applications) of the FOA for full details on the content and form requirements for the Technical Volume of the Full Application.

**Q38.B Where should we submit letters of commitment from our industry partners. Where should these go?**

**ANSWER:** Per Section VI.B.3 (Proof of Cost Share Commitment and Allowability) of the FOA, upon selection for award negotiations the Prime Recipient is required to provide cost share commitment letters from subrecipients or third parties that are providing cost share. Letters of commitment are not required as part of the Full Application. Please see Section VI.B.3 (Proof of Cost Share Commitment and Allowability) of the FOA for more information.

**Q39. The maximum page numbers allowed for the technical volume is 30 pages. The 3 page (max/person) PQS are embedded in the technical volume. Do the PQSs count against the page limit? For example if we have 5 PQS's that might use up to 15 of the 30 pages. Typical proposals of this type do not page limit the space for PQSs although they do limit the length of the individual PQS. What is the rule here?**

**ANSWER:** The Technical Volume is not limited to a total of 30 pages; however, Section IV.D.1 (Content and Form of Full Applications – First Component Technical Volume) of the FOA includes information on page limitations for each section of the Technical Volume. Regarding Personal Qualification Summaries (PQS), applicants are required to provide a PQS for the PI and each Key Participant. Section IV.D.1 of the FOA limits each PQS to 3 pages maximum per person. Please see Section IV.D.1 (Content and Form of Full Applications – First Component Technical Volume) for information on the contents of the Technical Volume and the applicable page limitations for each section.

**Q40. The "replies to reviewer comments" due date is November 6 - well after the full proposal due date. Is this in order to reply to reviewer comments on the full proposal or to the reviewer comments on the concept paper? Should we submit a Reply to Reviewer comments for the ConceptP?**

**ANSWER:** Once ARPA-E has completed its review of Full Applications, reviewer comments on compliant and responsive Full Applications are made available to applicants via ARPA-E eXCHANGE. Applicants may submit an optional Reply to Reviewer Comments, which must be submitted by the deadline in the MONITOR FOA (5PM, November 6, 2014). Applicants should not

submit a response to Concept Paper reviewer comments in their Reply to Reviewer Comments. Please see Section IV.A (Application Process Overview) for more information on the Reply to Reviewer Comments process and Section IV.E (Content and Form of Replies to Reviewer Comments) of the FOA for instructions on submitting a Reply to Reviewer Comments.

**Q41. P. 39 of the FOA solicitation states that each document submitted must conform to 1 inch margins, 12 point Times New Roman font. The FOA solicitation also states that we are to use the ARPA-E templates to prepare the documents. The ARPA-E templates are all set up with different font styles and different margins. I understand that some of the fillable business files such as the SF-424 and the Business Assurances and Disclosures form will not have to comply with the font/margin requirements, but how about your “Technical Milestones and Deliverables” template? That template, downloaded from your site, is set up with 0.5 inch margins left and right and also uses a Calibri 12 point font. Should we change this template to 1 inch margins all around and change the font to Times New Roman?**

**ANSWER:** Applicants do not need to adjust the font or margins of template documents provided by ARPA-E on eXCHANGE, such as the Technical Milestones and Deliverables template.

**Q42. We are looking to obtain a foreign work waiver for project work performed in a NON-U.S. facility based in Quebec and for foreign travel to this facility. There are 2 possible facilities to perform these tests: One in Texas and one in Quebec. We expect the Quebec facility to be much less expensive than the Texas facility, so that would be the justification. What is the likelihood of getting a waiver?**

**ANSWER:** As a general rule, all work under ARPA-E awards must be conducted in the United States or in U.S. territories. ARPA-E will consider requests to perform work outside the United States on a case-by-case basis. ARPA-E’s grant of a foreign work waiver is a fact dependent, case-by-case determination that is made only in exceptional circumstances and only for discrete parts of an award that necessitate foreign work. Foreign travel may be approved in limited circumstances by the Contracting Officer, but is not frequently approved. Applicants that anticipate needing to request a foreign work waiver to perform some work outside of the U.S. should review Section 5 of the Business Assurances & Disclosures Form.

**Q43. From your ARPA-E eXCHANGE User Guide (section 5.6, figure 25), it appears that as part of this process we need to check that we have “reviewed and agree to the Terms and Conditions in the FOA.” Reviewing the FOA I do not see anything that is either labelled Terms and Conditions or resembles a full set of Terms and Conditions. Please advise how I can obtain a copy of the terms and conditions I need to review prior to agreeing to them as part of this submission process**

**ANSWER:** This language refers to whether you have read the MONITOR FOA. A copy of the FOA can be downloaded on ARPA-E eXCHANGE at <https://arpa-e-foa.energy.gov>.

**Q44. We are a for profit company. Are we permitted to include a profit in our proposal? Is there a maximum percentage or dollar amount of profit that would be allowed?**

**ANSWER:** DOE Regulation 10 C.F.R. § 600.318 prohibits ARPA-E from paying a fee or profit on grants or cooperative agreements to recipients or subrecipients.

#### IX. Questions for week ending: SEPTEMBER 19, 2014

**Q45. Our current plan with regard to this proposal is to make our 25% cost share by covering two discrete types of tasks. Our proposal contains 4 major tasks and we want to devote all of our 25% cost share to one of the major tasks and some sub-tasks, rather than our cost share contribution being split among the 4 tasks. Can you confirm that this approach to making our Cost Share contribution is acceptable to ARPA-E?**

**ANSWER:** ARPA-E may not provide pre-submission assessments regarding an Applicant's proposed cost share contribution. For information on cost sharing, please review Section 9.2 (Cost Share Reporting) of the “Applicants’ Guide to Award Negotiations with ARPA-E” available at [http://www.arpa-e.energy.gov/sites/default/files/documents/files/Award\\_Negotiations\\_Guide081613.pdf](http://www.arpa-e.energy.gov/sites/default/files/documents/files/Award_Negotiations_Guide081613.pdf).

**Q46. I work for A SCIENTIFIC RESEARCH ARM OF A FEDERAL AGENCY and I am a key collaborator on a proposal with \*\*\*\*. At this point MY AGENCY’S OGC indicates the only way to accept funds associated with this proposal fROm DOE/ARPA-e is with an Interagency Agreement (Federal agency to Federal Agency). The FOA only states "Funding agreements with non-DOE/NNSA FFRDCs, GOGOs, and Federal instrumentalities (e.g., Tennessee Valley Authority) generally take the form of Interagency Agreements." It is not clear if this includes other Federal Agencies per the definitions of the terms. MY OGC also is evaluating the option of a CRADA for this funding but that decision may not occur until after we submit the proposal.**

**ANSWER:** Any funding to Federal Agencies, if appropriate and necessary to support the collaborative research, would be through agreements directly between ARPA-E and those entities.

**Q47. We have never proposed a Cost Share before and we want to make sure we are understanding it correctly. Can we arrange a phone conversation with you to clarify the rules? Please let us know if you are available for a call this week to clarify the cost share rules.**

**ANSWER:** ARPA-E may not provide pre-submission guidance on a project team's cost sharing requirement. Please also see the answer to Question 5 above. Please see Section III.B (Cost Sharing) of the FOA for more details on the cost sharing requirements for this FOA.

**Q48. There are a few problems with the required Budget Justification form SF424a that is attached to the package for DOE-FOA-0001128 MONITOR proposal applications.**

**1) The fringe benefit tab - there is no place to put dollar figures for personnel - you can only enter the fringe benefit rate (%). There are no calculations on that page and nothing from the fringe benefit tab is linked to the budget summary page.**

**ANSWER:** Only percentages and bottom line dollar values are requested in the table. Additional detail and calculations may be provided in the explanations/comments/ calculations /formula box listed below the table. Because different organizations have different rate calculations and methods for application, there is no linkage to other sheets, except the 'Instructions and Summary' sheet.

**2) The indirect cost tab has the same issues as the fringe benefit tab. No place to put direct costs - can only enter the F&A rate (%). And no information is linked to the budget summary page.**

**Answer:** Only percentages and bottom line dollar values are requested in the table. Additional detail and calculations may be provided in the Explanations/Comments/Calculations/Formula Box listed below the table. Because different organizations have different rate calculations and methods for application, there is no linkage to other sheets, except the 'Instructions and Summary' sheet.

**3) The entire form is password protected so you can't fix the errors.**

**ANSWER:** The Budget Justification – SF-424A Workbook is a protected document so ARPA-E can ensure consistency in budgetary calculations from applicants.

- 4) There are also links in the workbook that cannot be updated as the source (Jason's budget justification.xlsx) is not found.

**ANSWER:** The references do not have any impact on the formulas in the workbook. This should not limit your ability to complete the Budget Justification.