

Questions to DOE dated February 5, 2010

1. Clarification from DOE on the detail level of types of maps, land description details of the site(s) and plot plans (i.e. well location spots, etc.) will be needed.

Applicants should refer to the Cooperative Agreement under: Renewal Applications, III. Instructions for Preparing and Submitting the Renewal Application, C) Project Narrative Content, 3) Technology Merit, Technical Plan, and Site Suitability, for site description requirements.

Descriptions are required for both surface facilities and sequestration sites, including any alternatives. Maps and plot plans would be used to support any claims regarding the suitability and availability of the site. This may include (as appropriate), but not be limited to, availability of space for a capture system at the plant site, availability and proximity of necessary infrastructure, approximate locations of injection wells, pipeline routes, transmission line routes, proximity of any locations with environmental concerns, detailed information on characteristics of geologic formations (storage formations and overlying seal formations), locations of potential leakage paths including existing wells and geologic formations, and areal extent of the CO₂ plume. This is not meant to be an all inclusive list. Because each project is unique, applicants should provide sufficient descriptions supported by maps and plot plans to demonstrate the feasibility of both the capture and sequestration portions of the project.

Land descriptions can be brief, but should provide an overall description of both the capture and sequestration locations. These descriptions should provide an overview that supports the general viability of the site for the proposed activity. For example, a general description any existing plant facilities should be provided. For greenfield sites, which may include the sequestration injection site or greenfield plant site, a general description of the surrounding area including topography, vegetation, land use, proximity of cities and towns, that gives DOE a general understanding of the project setting. This overview should support the ability of the site to host the project, including ability to access the site, ability of the site to support needed infrastructure, and to meet environmental health and safety, socioeconomic and public policy requirements. .

2. Is there a standard or recommended financial model or template to be utilised for the downselect. (The requirements specified Excel 2003 – but is there a link to a model.)

There is no standard or recommended financial model. Applicants should include in their Phase 2 Renewal Application a financial model meeting requirements described in the Phase 1 Cooperative Agreement under: Renewal Applications, III Instructions for Preparing and Submitting The Renewal Application, Project Narrative File, C) Project Narrative Content, 7) Financial Business Plan, Financial Projections. Requirements are also found in: 8. List of Appendices to Project Narrative, Appendix F: Financial Model of Project.

3. What is the threshold for providing cost detail for subrecipients or consultant information? Requirements include hourly/daily rates, resumes, 2 invoices, statements

of availability, salary, basis for travel costs, etc. Is there a cost threshold set for third parties?

Each subawardee/subrecipient/subcontractor whose work is expected to exceed \$650,000 or 50% of the total work effort (whichever is less) should complete a Budget Justification package to include the SF 424A budget form, Budget Justification Guideline Excel document, and a narrative supporting the Budget Justification Guidelines. This information may be saved as a separate file or included with the Prime Applicant's Budget.pdf file. Summary level information for subawardees is not sufficient. Detailed explanations and supporting documentation are required.

For subawardees/subrecipients/subcontractors not exceeding the \$650,000 or 50% work effort limit, the Prime Applicant shall provide a detailed description of these subawardees/subrecipients/subcontractors and their costs in the Prime Applicant's budget narrative file.

Other suppliers of commercially-available goods and services, who have been, or will, be selected competitively, do not need to submit the SF-424A and other budget documentation. Costs for these goods and services should be included in the Applicant's, or other project team member's, budget documentation under a cost category such as the Equipment, Supplies, Contractual, Construction or Other Direct Cost line item. Documentation supporting the basis for the estimated cost, such as vendor quote, catalog price, prior invoices, etc. should be provided, as fully described in III) Instructions for Preparing and Submitting the Renewal Application, Cost Detail Requirements.

For consultants (regardless of dollar value): For Budget Justification purposes, the consultant does not need to provide a SF 424A and Budget Justification/narrative; however, the Applicant shall provide the following information in relation to the consultant within their Budget Justification/Narrative: "Consultants: Provide the hourly or daily rate along with the basis for the rate. Furnish resumes or similar information regarding qualifications or experience. Provide at least two invoices reflecting hourly or daily rates charged to customers other than the Government. A statement signed by the consultant certifying his or her availability and salary must be provided. If travel or incidental expenses are to be charged, give the basis for these costs."

4. Amount of government funding going to each team member? This is a new requirement for the Renewal? Is this an hourly estimate * agreed \$rate? How is this provided in the case of team members moving in and out of the project?

The amount of government funding going to each team member is supporting information needed by DOE to determine allowability of each team member's cost. Following Phase 2 award and approval of the budget plan, the Recipient does not need to update this and has flexibility to move funds within and between tasks.

5. Why budget information is only for non-construction programs (SF 424 A)? Phase 2 will include construction related costs.

These ICCS projects are not considered DOE “construction projects”. The SF 424A is the proper form to use.

6. Please send a sample format of cost details as mentioned in Cooperative Agreement Page 22. (A sample format for providing this Cost Detail information is available from the DOE Contract Specialist assigned to the Phase 1 award)

The Budget Justification Guideline Excel file is the sample format for providing Cost Detail and is available [here](#) (xlsx).

7. What cost details to be included in the budget justification file and what details to be included in technology cost data (required as an attachment for Topical Report)? Any sample format from DOE?

Budget Justification File: See Q&A number 3 as well as the “Cost Detail Requirements” specified under the “Budget Justification File” within the Renewal Application clause.

Technology Cost Data: There is no sample format for the technology cost data. The details to be included in the technology cost data can be found in the Statement of Project Objectives and is included below:

Task-Related Cost Breakdown

Budgeted and actual costs at the subtask level, rolled up to the task level, sub-phase, phase and total project, as applicable. Include rationale for deviations from the planned budget.

Capital and Operating Cost Breakdown (excluding project management and reporting costs)

- (a) Budgeted and actual capital costs by major system and subsystem components, capital costs by work breakdown structure, and fixed and variable operating costs by categories such as labor, fuel and feedstock, chemicals, and maintenance. Include rationale for deviations from the planned budget.
- (b) Project development costs, technology fees, pre-production costs and inventory capital. Project development costs include but are not necessarily limited to environmental permitting/characterization costs, legal fees, land costs, and infrastructure improvements such as transmission interconnections, roads and rail lines. Technology fees include prepaid licenses and royalties. Pre-production costs include operator training, equipment checkout and startup costs. Inventory capital includes spare parts, stored feedstocks (fuels and other consumables stored on-site), and first fills of chemicals and catalysts within process plant vessels.
- (c) Project finance structure, along with costs associated with arranging financing and the cost of interest during construction.
- (d) All capital costs in current-year dollars on an "as-spent" basis. Costs that are non-depreciable will be specified as such.

Project Team Cost Breakdown

Budgeted and actual costs by project team member (i.e., prime, sub-awardees/subcontractors and major vendors and suppliers). Identify the work (i.e., task/subtask) associated with the cost. Include rationale for deviations from the planned budget.

8. Please confirm it is OK to use Primavera schedule for Phase 2. Award document requires Microsoft Project 2007 later discussion implied Primavera would be OK. I want that confirmed before we start building it that Primavera is OK.

The Cooperative Agreements allows the project to utilize either Primavera or MS Project to manage their Phase 2 activities. NETL is attempting to convert to Primavera for all major demonstration projects. Until we do, we will ask those using Primavera to provide output in a format compatible with Microsoft Project.

9. What format should be used for the FFRDC's submittal for Phase 2? Is a new FWP (Field Work Proposal) required from National Labs participating in Phase 2?

A new FWP will be required for National Laboratory support of Phase 2 and should be included in the Phase 2 Renewal Application. Phase 2 Renewal Application documentation and discussion of National Laboratory involvement is the same as that required for the original Phase 1 Application.

10. Is our Phase 1 topical report also due on April 16, 2010? Will we submit the topical report along with the phase 2 application documents to the contract specialist assigned to the project, not through any website? This is what I read from the instruction but please have DOE to confirm. Some of our team members think we can delay the topical report to a later date.

The Phase 1 Draft Topical Report is due along with the Phase 2 Renewal Application on April 16, 2010. Recipients may continue to update the Draft Topical Report as work continues during the evaluation process, however, any new information included in this report will not factor into the evaluation. As stated below, the Draft Topical Report will be finalized either as the Phase 1 Final Topical Report or as the Final Report depending on whether or not the Recipient is selected to proceed into Phase 2. The complete Renewal Application package should be submitted to Brittley Robbins by mail as specified below.

NETL will be modifying all Phase 1 Agreements to specify the following submission process. Phase 1 Recipients shall submit one electronic copy (CD or flash drive) of their complete Renewal Application to one of the following addresses, depending on the method of delivery:

USPS Mail:

U.S. Dept. of Energy – NETL
Attn: Brittley Robbins, M/S 921-107
P.O. Box 10940
Pittsburgh, PA 15236-0940

or

Fed-Ex delivery:

U.S. Dept. of Energy – NETL
Attn: Brittley Robbins, M/S 921-107
626 Cochrans Mill Road
Pittsburgh, PA 15236-0940

Paper copies should not be submitted. The Renewal Application must be **received** by DOE-NETL no later than 4:30 pm (ET) April 16, 2010. Failure to provide a timely application may result in the application being rejected.

The Renewal Application shall be prepared in accordance with the requirements specified in the “Renewal Applications” clause of the Cooperative Agreement.
(end of submission instructions)

If the Recipient is selected to proceed into Phase 2, the Recipient shall also submit one PDF electronic file copy of the final Phase 1 Topical Report, incorporating DOE’s comments, directly to the OSTI Web site no later than 30 calendar days after the end of Phase 1.

If the Recipient is not selected to proceed into Phase 2, the Recipient shall submit one PDF electronic file copy of the final Phase 1 Topical Report, incorporating DOE’s comments, directly to the OSTI Web site no later than 90 calendar days after the end of Phase 1. The Topical Report will be renamed as a Final Report.

11. What kind of details DOE is looking for from the topical report? From the general description, we just need to prepare a topical report summarizing the actual accomplishments completed in the Phase 1; however, from the Guidelines on topical report table of contents, it appears we need to prepare more detailed technical data / findings. For example, we will be producing PFD under the surface facility preliminary engineering, should we include the PFD’s in the topical report or just a summary line saying we have done work to produce PFD?

The Phase 1 Topical Report shall be prepared in accordance with the guidelines set forth in the Federal Assistance Reporting Checklist instructions of the Cooperative Agreement and follow the “Guidelines for Electronic Submission and Organization of Final Scientific/Technical and Topical Reports” in the preparation of the Topical Report. The complete instructions and guidelines are in each Recipient’s Cooperative Agreement. In summary, this is to be a detailed report with sufficient technical detail to justify and support conclusions and accomplishments. With regard to the specific example, PFD’s should be included. In addition to following the guidelines, the Phase 1 Topical Report should include a non-proprietary programmatic and technical prospectus for Phase 2.

12. Cost share is not specifically defined within the cooperative agreement. These projects face severe economic challenges, where the applicant is expected to assume excessive

risk, based on DOE requirements, in an accelerated time schedule and low refining margin environment. Additional factors could increase cost exposure including uncertain regulatory environment, access to land, increased cost inflation, potential public resistance, commercial uncertainties around value of CO₂ allowances, etc. Early on, there was discussion of a possible 80% DOE cost share to encourage first movers to do this in the face of uncertain regulatory and risk environment. What is the status of this consideration?

As stated in the Funding Opportunity Announcement, DOE expects applicant cost sharing to be proportionately greater than 20% for projects with reduced technological risk or reduced uncertainty. DOE's target for recipient cost share for commercial-scale demonstration projects is 50%. Notwithstanding Phase 2 percentages included in selected applications, during the down-selection process from Phase 1 to Phase 2, DOE will again expect commercial-scale demonstration projects to share 50% of the qualifying Phase 2 cost. Degree of financial commitment will be an important consideration in Phase 2 selection.

As indicated under the Renewal Application clause, Part II.3 - Other Selection Factors, there are two cost share related Program Policy Factors that the Selection Official may utilize when making selections: (1) Degree of Federal cost share commensurate with technology maturation and risk and (2) Federal cost share per ton of CO₂ captured and sequestered annual for Technology Area 1.

13. PHASED APPROACH FOR PHASE 2 - The instructions for the Phase 2 Statement of Project Objectives break the project into three phases.

Phase 2A: Design

Phase 2B: Construction

Phase 2C: Operation

We interpret the instructions to require completion of Phase 2A prior to release of Phase 2B, and completion of 2B prior to the release of 2C. Since "detailed design" cannot be completed until equipment is purchased, due to the need for equipment dimensions, loads, connection locations, etc., Phase 2A cannot be completed until these purchases have been committed and we would propose including these procurement costs into the estimate for Phase 2A.

We would also like to point out that "detailed design" generally continues into the "construction" phase of a project, to reduce the overall schedule and costs. This is known as "fast tracking". If DOE wishes to restrict start of construction of the CCS until completion of all detailed design, the impact to the overall completion of the CCS will be substantial, both in time and cost. We need to understand the approach DOE requires prior to preparation of the Phase 2 Application.

DOE is not restricting the start of long lead procurement or construction until all detailed design activity is complete. Some design activities may continue beyond the start of construction activities. If this is the case, these design activities will be split into two

tasks, one in Phase 2A Design, and one in Phase 2B Construction. For example, electrical system design activities may be performed under Task 10 in Phase 2A Design, and additional electrical system design activities may be performed under Task 20 in Phase 2B Construction. The Applicant should propose a logical decision point between the Design and Construction Phases, and assign specific work to be performed in each phase. Applicants may propose to initiate long lead procurement in Phase 2A Design.

In summary, Applicants should propose three distinct phases, each with a clearly defined scope of work and logical decision points between phases. Activities that span two phases should be divided into two tasks, one for each phase.

14. What is the status of the class waiver regarding patents for the ICCS program?

The class waiver is currently under review, and we hope to have a decision by the end of February.

15. When will the public Fact Sheets on the ICCS projects be released for general distribution?

Each ICCS Recipient should work with their NETL Project Manager to provide the most up to date information on the Fact Sheet, and once each Fact Sheet is approved by the Recipient and by NETL's Management, it can be published.