

**AMENDMENT OF SOLICITATION**

Solicitation No. RFJ-8-77550 Request for Proposal	Amendment No. 05	Date: March 5, 2008
ISSUED BY: National Renewable Energy Laboratory 1617 Cole Blvd. Golden, CO 80401-3393	PROJECT NAME & LOCATION  Design/Build Subcontract for the Research Support Facility Golden, CO	
The above numbered solicitation is amended as set forth below. The hour and date specified for receipt of offers  <input checked="" type="checkbox"/> is not extended and remains 4 p.m. MDT, 3/27/08. <input type="checkbox"/> is hereby		
FAILURE TO ACKNOWLEDGE THIS AMENDMENT MAY RESULT IN REJECTION OF YOUR OFFER. EXCEPT AS PROVIDED HEREIN, ALL TERMS AND CONDITIONS OF THE SOLICITATION DOCUMENT REMAIN UNCHANGED AND IN FULL FORCE AND EFFECT.		
Subcontract Administrator: Karen Leitner		

This Amendment No. 5 to the Request for Proposal, RFJ-8-77550, is being issued to extend the date for receipt of Technical Questions from March 17, 2008 to March 19, 2008, answer questions that have been submitted to date, and to change the Owner RFP Contact information.

- Question No. 1:            Page 2, Article 1, C.2, Add Alternate No. 1. This paragraph indicates that the scope of work MAY be added at NREL’s option. The site is an integral component of this project, and in order to attain LEED platinum, the design-builder needs to control this portion of the work. Will NREL consider being more definitive on this statement, such as: “NREL intends to award this portion of work to the successful design-builder pending successful negotiations after award of Phase I” or similar words to that effect?
- Answer No. 1:            The Anti-Deficiency Act states that we cannot make or authorize an expenditure or obligation exceeding an amount available in an appropriation or fund for the expenditure or obligation. Because NREL does not have the funding required for the work outlined as Add Alternate No. 1, we cannot make a definitive statement regarding this work at this time. Upon receipt of the funding required, NREL can exercise this option under the design-build subcontract. NREL understands the impact the Add Alternate No. 1 work has on attaining the LEED™ Platinum requirement.
- Questions No. 2:            Page 13, Article 15: The requirement to perform 20% of total amount of work to be performed under the subcontract is impossible to achieve during Phase I since most of the work is design, and the sponsor of this proposal is a design-builder, and intends to subcontract the design to a professional design firm. Will this provision be waived for Phase I?
- Answer No. 2:            Please refer to Amendment No. 4, issued February 21, 2008, attachment titled Introduction, revised page 4 of 300, last paragraph states “Prior to subcontract execution for preliminary design (Phase I), terms and conditions relevant and applicable to Phase I of the subcontract will be specified in Article 34 – Alterations to Terms and Conditions. The requirement for 20% of work to be self performed will be identified as a requirement of Phase II work.
- Question No. 3:            Page 3 of 300, Article 4.c., general construction costs. This suggests that a price for the entire project is to be submitted. This seems to contradict the language in other areas, such as on page 3 of 300 Phase II, Article 3.a, 3.b, 3.c, and also on page 33 of 300 which suggests only preliminary design work costs submitted for Phase I. Is it the intent of NREL to ask offerors to include the anticipated total project costs in this initial submission which is due on March 27, 2008.

Answer No. 3:

General Construction Costs which are to be submitted as part of your proposal which is due on March 27, 2008, are outlined on page 40 – 42 of 300 in the RFP. The following information/definitions are provided for Cost of the Work, Direct Work, and Indirect Work and shall be used for the compilation of General Construction Costs:

The subcontract price components have been developed to ensure that costs are segmented: all overhead and profit for this project will be included in the overhead and profit components only. Fees will not be allowed within the subcontracts, materials, installed equipment, construction equipment, labor, general conditions costs, bonds, insurance and permit fees.

When the offeror develops proposed general conditions fee rates, subcontractor shall include anticipated inflation rates for the duration of the project. General Conditions costs determined during negotiations of subcontractor's proposal shall constitute a fixed amount for such costs unless modified by Change Order and shall be billed as actual costs.

**COST OF THE WORK** (definition only)

The term "Cost of the Work" means the sum of all costs necessarily incurred and paid by the subcontractor in the proper performance of the work. Except as otherwise may be agreed to in writing by the Owner, such costs shall be consistent with those typically found in the local market conditions. This represents all costs determined as subcontractor's responsibility through a fixed price; including all direct work and indirect work. The Cost of the Work shall include all approved change orders.

**DIRECT WORK** (definition only)

"Direct Work" represents actual construction work performed on the project including: labor, materials, equipment or other. The direct work is limited to fixed price subcontracts and allowances only.

**INDIRECT WORK** (definition only)

"Indirect Work" is what is required to complete the project beyond the direct work. Indirect work includes general conditions, overhead and profit (fee), subcontractor's bonds, subcontractor's insurance and permits as required.

The following outlines allowable and unallowable cost elements for General Conditions cost which shall be used when determining General Conditions cost:

**ALLOWED COST ELEMENTS FOR GENERAL CONDITIONS COST:**

Salaries and wages, employee benefits and travel expensed for construction superintendent and other on-site personnel listed in Proposal as general conditions cost personnel engaged in managing the entire project, and reasonable changes to such list of personnel, not including personnel who are managing the self-perform work. Payroll costs for employees not employed full time on the work shall be apportioned on the basis of their time spent on the work. The expenses of performing work after regular working hours, on Saturday, Sunday or legal holidays shall be included in the above only to the extent authorized by Owner. Employee benefits shall be limited to social security contributions paid by employer, unemployment taxes, other payroll taxes paid by employer, workers' compensation, health and retirement benefits, sick leave, vacation and holiday pay.

On-site construction office trailer: rental, set-up and removal, maintenance.

Equipment, office materials and services at trailer: Office supplies, fuel for heating, photocopying, drawing reproduction, shop drawings, printing service, postage and express delivery service, telephone service, telephone system and setup of system, furniture, computers, printers, photocopiers, fax machine, with equipment acquired by purchase or rental.

Long distance telephone calls and cell phone charges for project business.

Materials and services at job site: water, electricity, sanitary facilities, signs, petty cash expenses, photographic services for progress photographs, radios required for communication, jobsite safety costs, debris boxes, site fencing, interim cleanup, final cleanup, snow and ice removal, temporary building enclosures.

Job site vehicles for supervisory and administrative personnel, at purchase cost minus market value at end of project or lease cost for project period, fuel and maintenance for vehicles.

**COSTS NOT ALLOWED TO BE CHARGED AS GENERAL CONDITIONS COSTS:**

Construction labor, staff for the supervision and performance of self-performed work. Cost, including transportation, maintenance, loading, unloading, installation, dismantling and removal of all materials, supplies, equipment, and appliances at the site (other than for the construction office trailer and its office equipment), and hand tools not owned by the workers, which are consumed in the performance of the work, or used but not consumed which remain the property of the Subcontractor, or incorporated into the work.

Overhead costs allocable to construction labor or materials. Consultants, including engineers, architects, testing laboratories, surveyors, attorneys, accountants, data processing personnel and any others.

Travel expenses of the subcontractor's employees not engaged in on-site management of the project.

Out of State travel expenses for any employee without prior approval of Owner.

Sales, consumer, use, excise and similar taxes.

Deposits lost by subcontractor.

Losses, and damages and related expenses, not compensated by insurance or otherwise, to the work or otherwise sustained by subcontractor in connection with the performance and furnishing of the work.

Payroll costs and other compensation of Subcontractor's officers, executives, principals of partnership and sole proprietorships, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing agents, contracting agents, expeditors, timekeepers, clerks, data processing personnel, human resource personnel, and other personnel employed by the subcontractor whether at the site or in Subcontractor's fee (overhead and profit).

Expenses of Subcontractor's principal and branch offices and all personnel stationed at such offices, other than Subcontractor's office at the site.

Any part of Subcontractor's capital expenses, including interest on Subcontractors capital employed for the work and charges against Subcontractor for delinquent payments.

Costs due to the negligence of Subcontractor, any lower-tier Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective work, disposal of materials or equipment wrongly supplied and making good any damage to property.

Temporary housing for project personnel.

Other overhead or general expense costs of any kind, including extended overhead and the cost of any item not enumerated in the list of costs allowed.

Any fines, penalties or other judgments imposed by local, state or federal authorities against Subcontractor or any lower-tier Subcontractor.

Costs which would cause the agreed upon general conditions costs to be exceeded.

- Question No. 4: Page 3 of 300, Article 4.d, cost associated with self performance of work. Same clarification as in question number 1 above. Also, please clarify what is intended in “cost associated with self performance of work”. Is this intended to be the total value of self performed work under this subcontract?
- Answer No. 4: Please refer to Pages 40 – 42 of 300. The shaded areas are the information which must be submitted as part of your proposal. Percentage of cost for self-perform general conditions and self-perform overhead and profit is the information which is required.
- Question No. 5: Page 3 of 300, Article 4.e, indirect work costs. Same clarification as in question number 1 above.
- Answer No. 5: Please refer to Pages 40 – 42 of 300. The shaded areas are the information which must be submitted as part of your proposal. Percentage of Project Overhead and Profit, Project Bonds and Project and Insurance is the information which is required.
- Question No. 6: Page 33 of 300, Subcontract Price, Article B. This spread sheet is for Phase II. Is it the intent of NREL to have this filled out and submitted by offerors in the submission due on March 27, 2008?
- Answer No. 6: Yes. The total not-to-exceed budget of the entire project is \$64,261,000.00 and we’re requesting a demonstration of how the costs will be distributed through Phase II of the subcontract.
- Question No. 7: Page 35 of 300, Subcontract times, Article A. Is this blank space intended for work required under Phase I only?
- Answer No. 7: The definition of Substantial Completion is located on Page 30 of 300. This is intended for work required under Phase I and II.
- Question No. 8: Page 38 of 300, Proposal Phase Substantiation Checklist. What is the intended use of the blank columns entitled “milestone” and “submitted date”? Is it NREL’s intention to have offerors complete these columns and submit with proposal? All items on this checklist are required to submit as a part of the proposal, so the submitted date seems to be asking something different. Please clarify.
- Answer No. 8: Page 38 of 300, Proposal Phase Substantiation Checklist, is deleted in its entirety and replaced with the following:

**PROPOSAL PHASE SUBSTANTIATION CHECKLIST**

This substantiation checklist is to be submitted with the Proposal Form for evaluation purposes. Each item shown on the list must be submitted as part of the Proposal in order to be “responsive”. In the column identified as “Reference Location”, the design-builder should indicate where the submittal is located within the Proposal. This will allow the evaluation committee to easily and successfully review the proposal documentation.

RFP Chapter	Subsection #	Description	Included (Check)	Reference Location
<b>SUBCONTRACT</b>	Article 18	Provide a schedule for construction from preliminary design through closeout in accordance with the requirements of Article 18 of the Subcontract		
<b>PROPOSAL- Part 3- Performance Specifications</b>				
<b>EXECUTION</b>	C.6.a	Corporate health and safety program		
<b>FACILITY PERFORMANCE</b>	A.4.g.1	LEED Checklist annotated to show specific credits to be achieved with brief description of how they will be achieved.		
	F.1.a.1	Calculation of Gross Building Area, Building Common Area and Floor Common Areas, and net area of each space		
	F.2.b.1	Calculation demonstrating the "btu/sf/year" of the proposed design concept.		
	F.2.b.2	Identification of method of calculation of energy efficiency to be employed.		

	F.3.a.1	Estimated quantity of water that will be used in the first year of operation, divided into domestic water, HVAC water, and other water categories, with quantity of water recycled, if any; include basis of estimates		
	F.4.c.1	Type of operating personnel and amount of training required; identification of each equipment item or system for which more than one day of training is required; identify source of data		
<b>SUBSTRUCTURE</b>	D.5.a	Identification of major structural materials and systems		
<b>SHELL</b>	B.5.d.1	Identification of spaces relying on natural ventilation with description of ventilation concept and required building elements.		
	B.8.c.1	Concept drawings of proposed solution indicating overall building configuration, massing, scale, materials, and relationship to surrounding buildings		
	B.8.D.1.b.1	Identification of major structural materials and systems		
<b>INTERIORS</b>	B.1.a.1	Information on overall building configuration that will permit natural ventilation of all major spaces		
	B.4.d.1	Information on overall building configuration that will permit daylighting to levels specified		
<b>SERVICES</b>	F.1.g.1	Description of systems required, sources, input-side capacities, and means of distribution		
<b>EQUIPMENT AND FURNISHINGS</b>	D.1.a.1	Identification of proven-in-use assemblies of the same type, for inspection by Owner.		

**SUBMITTED BY**

- A. By: \_\_\_\_\_
  - 1. (Firm Name)
- B. Signature: \_\_\_\_\_
- C. \_\_\_\_\_
  - 1. (Typed or Printed Partner or Officer's Name)

Question No. 9: Page 43 of 300, Project Objectives Checklist. Since design for Phase I is only intended to be advanced to the conceptual design state, it seems premature to be definitive on inclusions of scope until the accepted preliminary design is reconciled with funds available, which is to take place during Phase II of this subcontract. Please clarify intent of this component of the proposal during Phase I of this solicitation.

Answer No. 9: The purpose of the Project Objectives Checklist is to ensure all offerors are responding to the project requirements. It establishes a clear and unambiguous understanding of the project requirements. It establishes a clear and unambiguous understanding of the Request for proposal (RFP) and the owner requirements. As noted in the RFP, page 3 of 300, Solicitation Process, 2, (per Amendment No. 4 to this RFP), the “Offerors are to respond to the RFP requirements with a conceptual approach including a fixed price for preliminary design with proposed scope of work defined by the Project Objectives Checklist (Mission Critical, Highly Desirable, and If Possible). The conceptual approach will define how the offerors demonstrated their approach to meeting the RFP requirements. The actual scope of work defined by the Project Objectives Checklist (Mission Critical, Highly Desirable, and If Possible) is not required until Phase II of the subcontract as defined in the RFP. Page 4 of 300, Phase II of the Subcontract, 1.c.

Question No. 10: Page 45 of 300, Planning Units Checklist. Same issue as Project Objectives Checklist is question number 7 above. Please clarify intent for Phase I.

Answer No. 10: The purpose of the Planning Units Checklist is to ensure all offerors are responding to the project program requirements. It establishes a clear and unambiguous understanding of the Request for Proposal (RFP) program requirements. As noted in the RFP, page 37 of 300, Attachments to proposal Form this is required for the proposal by all offerors. The conceptual approach will define how the offerors demonstrate their approach to meeting the program requirements. The number of occupants defined by the Planning Units Checklist is not required until Phase II of the subcontract as defined in the RFP, Page 4 of 300, Phase II of the Subcontract, 1.c (per Amendment No. 4 to this RFP).

Question No. 11: Page 268 of 300, Article A.4.a, Daylighting. Language mandates: ambient natural lighting in primary spaces that is of intensity for essential tasks when measured on a typical overcast winter day in mid-afternoon: is a significantly more stringent requirement from LEED credit requirement of “2% daylight factor at the same equinox at noon on a sunny day”. Additionally, item 2) in same subparagraph requires the design to provide “minimum light levels not less than those recommended in IESNA Lighting Handbook 2000” seems to be attempting to describe natural lighting, but this standard is designed for artificial lighting. Is it NREL’s intent that the design provides daylighting meeting the IESNA requirements for essential tasks on an overcast winter day? If this is not the intent, then these provision should be revised to be more compatible with the LEED indoor Environmental quality Credit 8.1, and the IESNA requirement be omitted from this section.

Answer No. 11: The LEED™ version 2.2 dated Oct 2007 daylighting credit requires modeling to demonstrate “a minimum of 25 horizontal footcandles in 75% of all regularly occupied spaces under clear sky conditions at the eqinox (March and Sept.) at 30” above the floor not a “2% daylight factor at the summer equinox at noon on a sunny day”. The NREL intent is to have one integrated lighting system (daylight and electric) that meets our energy goal and provides a comfortable (glare free) work environment for staff. NREL defines an integrated lighting system to include the orientation and sizing of the windows and the placement and sizing of the shading devices, the properties of the glazing, the electric lighting system and control strategy and the interior finish materials and colors. In order to meet the energy goal for the building, the daylighting scheme will need to reduce electric energy for lighting significantly (on the order of 70%).

Regarding the IESNA standard, it is referenced to insure that there are both adequate and quality lighting

for a given task. In our case the amount of lighting available is the daylight plus electric. It is our intent to provide enough lighting for a given task through daylight supplemented with electric lighting when needed (such as task lighting with individual controls), for example at night or late winter afternoon. IESNA Lighting standards refers to both qualitative (light levels) and quantitative aspects (such as directionality, balanced lighting, glare-free, etc.) that are necessary for an excellent lighting system regardless of whether the source of a light is daylight or electric.

Question No. 12: We have learned that a conceptual EnergyPlus building energy simulation model has been developed and is used by NREL staff for the RSF project. Is it possible for the design-build teams to obtain this model, including parametric sensitivity models derived from the baseline model?

Answer No. 12: Using the proper set of inputs, a web based tool known as the EnergyPlus Example File Generator can be used to recreate a simulation that is within the optimal region that NREL researchers identified. The tool can be accessed at <http://www.eere.energy.gov/buildings/energyplus/cfm/inputs/> and NREL's suggested inputs are provided with in the attached documents. After submitted a building description through the web based form, an EnergyPlus simulation will be carried out and the results will be returned through the user's email. Many files are returned including the EnergyPlus input file.

Question No. 13: Has there been a traffic study conducted by NREL for this project. If so, can the design-build teams obtain a copy of it?

Answer No. 14: The traffic study information is provided in electronic form as an attachment to this Amendment.

Question No. 15: Natural ventilation may be an appropriate strategy to help meet the overall energy budget. Will NREL allow summer interior design conditions (page 251 of 300) to be relaxed when natural ventilation is used to condition the naturally "ventilated" spaces?

Answer No. 15: This question was answered previously. Reference question/answer no. 75 in the "Master List of Questions Submitted Prior to 12/6/07" Question No. 75 and the answer are repeated below.

75. Page 246, Paragraph A1a. Natural ventilation may be an appropriate strategy to help meet the overall energy budget. Will NREL allow summer interior design conditions to be relaxed when natural ventilation is used to condition the naturally "ventilated" spaces?
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- a. The interior design conditions identified in the RFP shall be maintained within the limits of ASHRAE 55.
- b. We will consider adjustments to ASHRAE 55 based on the current research using natural ventilation in spaces.

Question No. 16: Will the scope of commissioning (those building components and systems to be commissioned) exceed those required by the LEED-NC rating system? If so, please indicate all building components to be commissioned by the design-build team.

Answer No. 16: As required by the RFP Part 1 – Procedures, Design and Construction Procedures, Quality Requirements, F – Field Testing and Inspection, the design-builder is required to provide a full commissioning plan and conduct all commissioning activities for the RSF. Also as required by the RFP Part 1 – Procedures, Attachment to Proposal Form, Project Objectives Checklist, the design-builder is required to deliver a LEED™ Platinum building as certified by the US Green Buildings Council. The substantiation requirements for these tasks are in the Part 3 – Performance Specifications. Both these requirements must be met by the design-builder.

Question No. 17: Can we assume that our submission (in both design and costing) does not need to provide any response to the "Proposed Action description for the South Table Mountain Supplemental Site Wide Environmental Assessment"?

Answer No. 17: Yes. In response to proposed actions on the NREL South Table Mountain Site (STM), DOE is examining the potential environmental impacts of these actions. A Supplemental Environmental Assessment (SEA) is in progress and is expected to be completed in March of 2008. At this time, it is not expected that there will be a specific response required by the design-build team for the RSF in response to the SEA.

Question No. 18: Has the Design-Build Consultant position been awarded?

Answer No. 18: No. Award is anticipated to be shortly prior to the award of the RSF design-build subcontract.

Question No. 19: What portion of TI cabling, wire pull, and termination is to be carried by the design-builder and what portion is provided by the Owner?

Answer No. 19: The design-builder is required to design, install, terminate, test and label all the conduit, wire, cable, hardware for the voice and data systems. The systems should be complete from the source point to a central telecom room as designed by the design-builder. The systems shall end at a location, agreed to by the owner, within the telecom room. The owner will make final connections from the building systems to the existing NREL systems.

Question No. 20: Is a survey of used furniture available? Please provide the location and contact information to view the used furniture.

Answer No. 20: At the time of the initial One-on-One discussions with the offerors in December 2007, it was anticipated there would be excess systems furniture available for possible refurbishment and reuse in the RSF. Since then, NREL has continued to hire new employees at an unprecedented rate. At this time, it is anticipated that there will be not excess systems furniture available for use in the RSF.

The date for receipt of technical questions is hereby extended from March 17, 2008 to March 19, 2008.

The Owner RFP Contact information is hereby updated to change the Mail Stop Number from 1632 to 1533 on pages 8 of 300 and 32 of 300 in the RFP.