

IBPSA-USA BEM Training Workshop Update

Request for Qualifications

11/1/2021

Overview:

The contractor will develop training materials covering building energy modeling fundamentals and current best practices. In consultation with the IBPSA-USA Project Execution Committee (PEC), the subcontractor will develop a detailed outline for a full-day, six hour training session. Following approval of the outline, the subcontractor will develop presentation slides and supplementary materials for the first training session (three hours). Development of the second half of the training materials is subject to availability of funding and is not covered by this contract.

The total budget available for this work is \$31,600.

Submission Deadline: December 6th, 2021 5pm Pacific

Scope of Work:

This course is intended to be a major overhaul of the existing IBPSA-USA building energy modeling course [[link to slides for reference](#)], starting with a fresh outline and incorporating existing materials only where appropriate. The primary audience is engineers and architects who are performing energy modeling or are considering starting. The training must be “tool agnostic” and applicable to users of different simulation programs.

The following should be topics of emphasis.

- **Fundamentals**
 - Heat transfer, load calculation, simulation methods
 - System and component modeling methods
 - Weather and Climate data
- **Skills**
 - Developing model inputs
 - Workflow
 - QA and QC
 - Making an impact. Working effectively with and presenting modeling results to others on the design team
 - Business of modeling. Scope and budget.
- **Applications**
 - Appropriate applications for whole-building energy simulation
 - Early design
 - Predictive modeling for energy consumption and carbon emissions

- ASHRAE Standard 209
- Existing buildings
- Code compliance
- Green building rating systems

Other course content considerations.

- The training must be designed to work both for in-person and online presentation
- Content should be designed to work as multiple modules of approximately 20 minutes or less
- Interactive elements should be included to aid learning, and they should work both in-person and live online
- Case studies should be included. Recent and relevant examples.

Tasks

- **Task 0 Project management**
 - Attend online meetings with the Project Execution Committee (PEC)
 - Kickoff
 - Draft outline review
 - Final outline review
 - 50% content review
 - 100% content review
 - Monthly progress reports
- **Task 1 Course Outline for Full Course**
 - **1.1 Detailed course outline**
 - In consultation with the Project Execution Committee (PEC), the contractor will develop a detailed outline for a full-day, six hour training session. The outline will identify exercises and other interactive elements.
 - *Deliverables*
 - 1.1.1 Draft outline
 - 1.1.2 Final outline
 - **1.2 Presentation format and example slides**
 - The contractor will develop a proposed format for presentation slides and provide example slides for review and approval by the PEC.
 - *Deliverables*
 - 1.2 Presentation slide template and example slides
- **Task 2 Phase 1 of Course Presentation Materials**
 - **2.1 Course materials**

- The contractor will develop presentation materials including PowerPoint slides with detailed speaker notes and supplemental materials for the first three-hour training session.
- *Deliverables*
 - Slides, speaker notes and supplemental materials
 - 2.1.1 50% complete
 - 2.1.2 100% draft
 - 2.1.3 Final
- **2.2 Video recording**
 - The contractor will collaborate with IBPSA-USA staff to present the first 3-hour training session for recording.
 - *Deliverables*
 - 2.2 Video recording
- **2.3 BEMcyclopedia integration**
 - 2.3 The contractor will provide 8 hours of support for adapting course materials for inclusion on the BEMcyclopedia website¹.

Deliverables and Timeline:

Deliverable/Milestone	Date
0.1 Issue RFQ	11/1/2021
0.2 Proposal deadline	12/6/2021
0.3 Notice of selection	1/3/2022
0.3 Project Kickoff	1/15/2022
0.4 Monthly Progress Reports	Monthly
1.1.1 Draft detailed outline	2/15/2022
1.2 PowerPoint template	3/15/2022
1.1.2 Final detailed outline	3/15/2022
2.1.1 50% slides and supplemental materials	5/31/2022
2.1.2 Draft slides and supplemental materials	6/30/2022
2.1.3 Final slides and supplemental materials	8/31/2022

¹ http://bemcyclopedia.com/wiki/index.php/BEMcyclopedia_-_The_Energy_Modeling_Knowledgebase

2.2 Presentation recordings	9/15/2022
2.3 BEMcyclopedia integration	9/15/2022

Format for Submittals:

The statement of qualifications should include the following information and be no more than four pages long excluding CVs and example presentation materials.

- Identify all personnel who would work on the project and briefly describe their roles.
- Briefly describe the proposed approach to developing presentation materials including choice of presentation software (e.g. PowerPoint) and method to create graphics.
- Provide a table of hourly billing rates for all personnel and an estimate of their hours by task.
- Describe any proposed cost sharing or match funding.
- Attach a CV for each including previous training experience.
- Attach one or more examples of relevant presentation materials developed by key personnel.

Evaluation of Submittals:

IBPSA-USA will evaluate all submittals to determine which Consultants have the experience and qualifications that are best suited for this project. The following criteria will be considered.

- Relevant BEM technical and practice knowledge
- Evidence of successful professional training experience
- Proposed approach to developing materials and quality of example presentation materials
- Capacity to complete work on schedule
- Demonstrated involvement with IBPSA-USA or similar communities
- Billing rates
- Optional cost share or match funding

IBPSA-USA may in the course of soliciting proposals:

- modify the timeline
- negotiate with one or more respondents to modify the proposed scope
- solicit contracts with one or more respondents for all or a portion of the work
- opt not to pursue any proposals at the current time

Submission Schedule:

Submit qualifications in PDF form via email to Mike Wilson, jobs@ibpsa.us , by 5:00pm Pacific time on December 6, 2021.