Joint UCSD-UB-UNR

Shake Table Training Workshop

Managing NEESR Projects

Large Scale Structures Laboratory

NEES@University of Nevada, Reno

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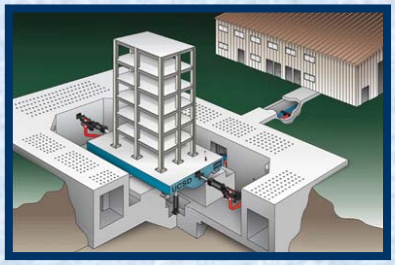
Site Operations Manager



NEES@UC San Diego

NEES@UBuffalo

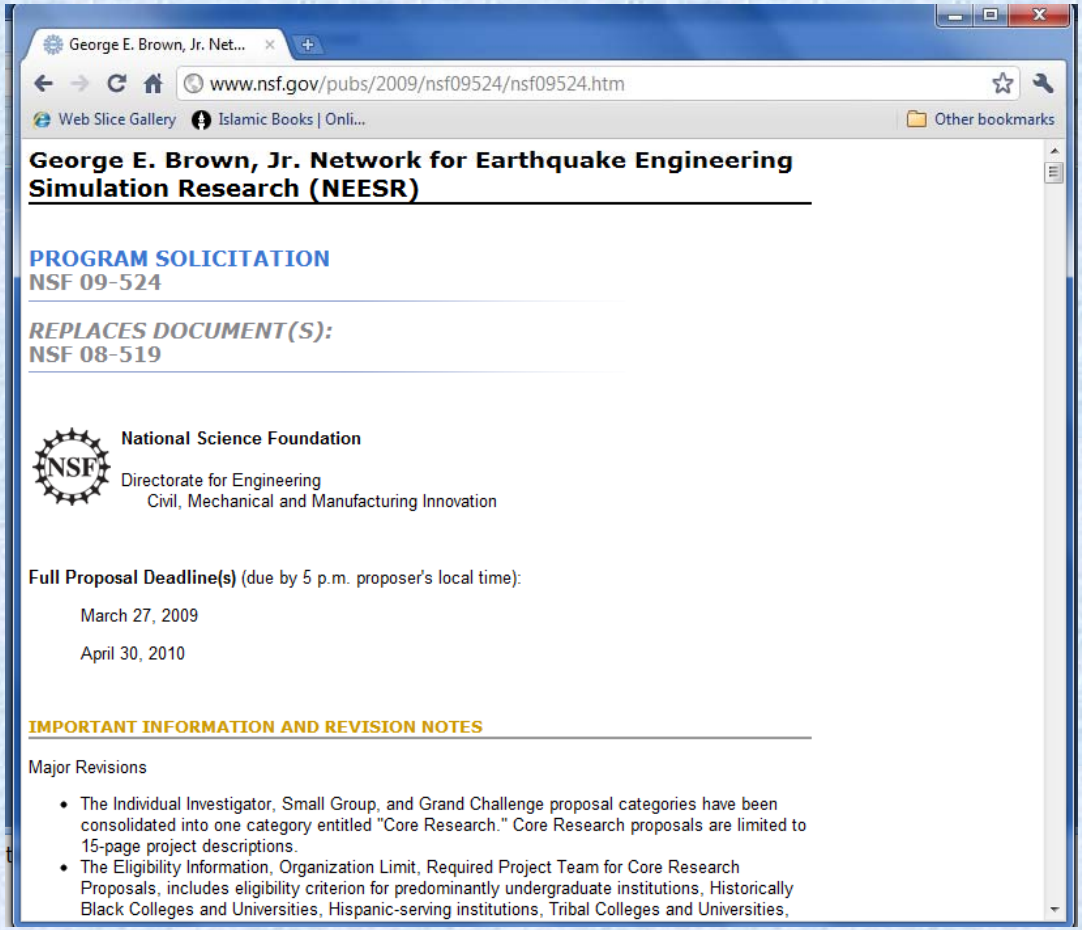
NEES@UNevada-Reno

Outline

- NEESR Program Solicitation
- Program Requirements
  - ESPCC Process
  - ESUF and SUA
- Site Requirements
  - Scope of ES Services
  - Project Coordination and Scheduling
  - Safety and Risk Management
- Summary for Successful Project Management



NEESR Program Solicitation



http://www.nsf.gov/pubs/2009/nsf09524/nsf09524.htm

NEESR Program Solicitation

- Categories
  - Core Research (CR) $75,000 - $400,000 per year for up to 3 years
  - Simulation Development (SD) $100,000 per award for up to 2 years
  - Payload $100,000 per award for up to 2 years
- Must use **one or more** of the 14 NEES equipment sites
- " advance knowledge discovery and innovation for (1) earthquake and tsunami loss reduction of our nation's civil infrastructure, and (2) new experimental simulation techniques and instrumentation for NEES."
- Emphasize why site is necessary for project!



NEESR Program Solicitation

- Awarded projects must conform to:
  - NEES Facilities Users Guide (FUG)
  - Data Sharing and Archiving Policies and Guidelines



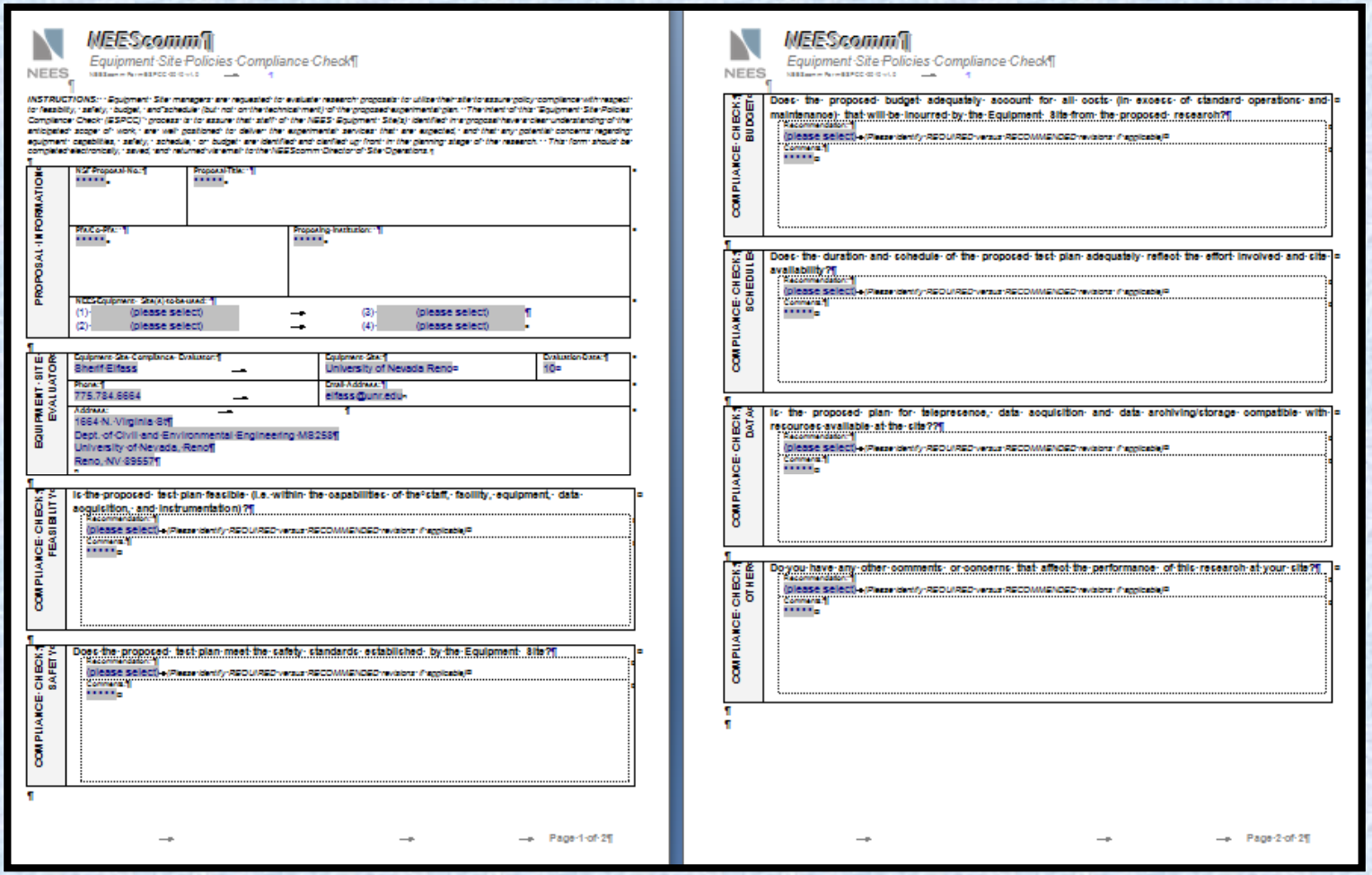
Program Requirements

1) Equipment Site Policies Compliance Check (ESPCC)
   - Required for NSF – recommended awards
     "The intent of the ESPCC process is to assure that the operations staff and PIs at the NEES Experimental Site identified in a proposal have a clear understanding of the anticipated scope of work, are well positioned to deliver the experimental services that are expected, and that any potential concerns regarding equipment capabilities, project feasibility, safety, schedule or budget are identified and clarified upfront in the planning and budgeting stage of the research."

   - The ESPCC "Compliance Check" categories are:
     - Feasibility
     - Budget
     - Data
     - Safety
     - Schedule
     - Other



ESPCC Form



NEEScomm¶

Equipment Site Policies Compliance Check¶

INSTRUCTIONS: "Equipment Site managers are requested to evaluate research proposals to utilize their site to assure policy compliance with respect to "feasibility," safety," budget," and "schedule (but not on the technical merit) of the proposed experimental plan. "The intent of this "Equipment Site Policies Compliance Check (ESPCC)" process is to assure that staff of the NEES Equipment Site(s) identified in a proposal have a clear understanding of the anticipated scope of work," are well positioned to deliver the experimental services that are expected," and that any potential concerns regarding equipment capabilities," safety," schedule," or budget" are identified and clarified up front in the planning stage of the research. "This form should be completed electronically," saved," and returned via email to the NEEScomm Director of Site Operations.¶

PROPOSAL INFORMATION

NSF Proposal No.:¶ *****¤

Proposal Title:¶ *****¤

PI/Co-PIs:¶ *****¤

Proposing Institution:¶ *****¤

NEES Equipment Site(s) Identified:¶
(1) (please select) (3) (please select)¶
(2) (please select) (4) (please select)

EQUIPMENT SITE EVALUATOR

Equipment Site Compliance Evaluator:¶ Sherif Elfass

Equipment Site:¶ University of Nevada Reno¤

Evaluation Date:¶ 1/0¤

Phone:¶ 775.784.6864

Email Address:¶ elfass@unr.edu¤

Address:
1664 N. Virginia St¶
Dept. of Civil and Environmental Engineering MS 258¶
University of Nevada, Reno¶
Reno, NV 89557¶

COMPLIANCE CHECK: FEASIBILITY

Is the proposed test plan feasible (i.e. within the capabilities of the staff, facility, equipment, data acquisition, and instrumentation)?¶

Recommendation:¶
(please select) ← (Please identify: REQUIRED versus RECOMMENDED revisions if applicable)¤
Comments:¶
*****¤

COMPLIANCE CHECK: SAFETY

Does the proposed test plan meet the safety standards established by the Equipment Site?¶

Recommendation:¶
(please select) ← (Please identify: REQUIRED versus RECOMMENDED revisions if applicable)¤
Comments:¶
*****¤

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NEEScomm¶

Equipment Site Policies Compliance Check¶

COMPLIANCE CHECK: BUDGET

Does the proposed budget adequately account for all costs (in excess of standard operations and maintenance) that will be incurred by the Equipment Site from the proposed research?¶

Recommendation:¶
(please select) ← (Please identify: REQUIRED versus RECOMMENDED revisions if applicable)¤
Comments:¶
*****¤

COMPLIANCE CHECK: SCHEDULE

Does the duration and schedule of the proposed test plan adequately reflect the effort involved and site availability?¶

Recommendation:¶
(please select) ← (Please identify: REQUIRED versus RECOMMENDED revisions if applicable)¤
Comments:¶
*****¤

COMPLIANCE CHECK: DATA

Is the proposed plan for telepresence, data acquisition and data archiving/storage compatible with resources available at the site??¶

Recommendation:¶
(please select) ← (Please identify: REQUIRED versus RECOMMENDED revisions if applicable)¤
Comments:¶
*****¤

COMPLIANCE CHECK: OTHER

Do you have any other comments or concerns that affect the performance of this research at your site?¶

Recommendation:¶
(please select) ← (Please identify: REQUIRED versus RECOMMENDED revisions if applicable)¤
Comments:¶
*****¤

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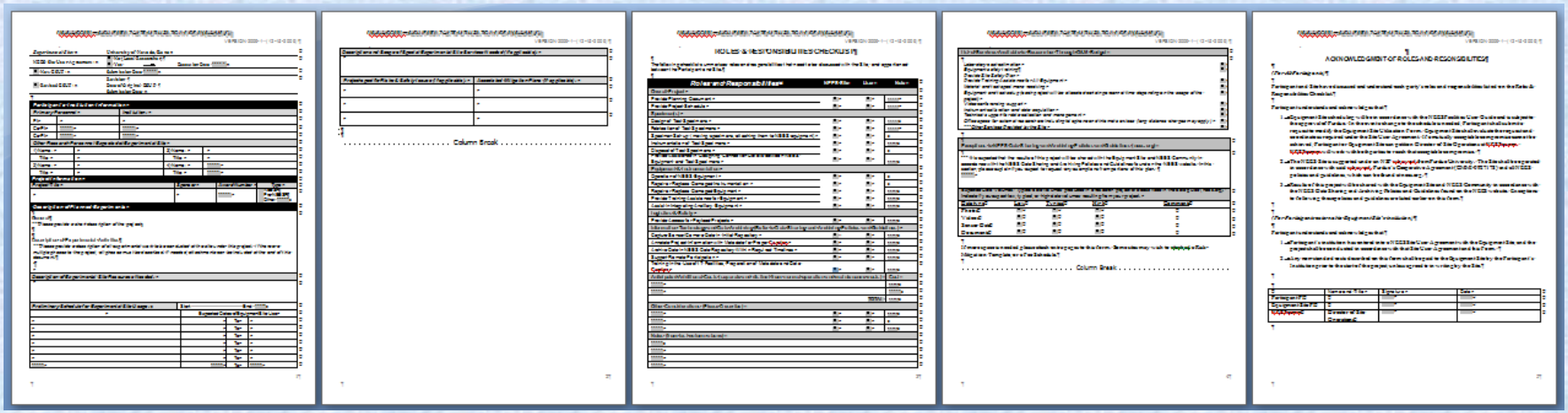
Program Requirements

2) Site User Agreement (SUA)
   - Required only if the researcher is not affiliated with equipment site
   - Contractual language
   - Between equipment site and researcher institution

3) Equipment Site Utilization Form (ESUF)
   - It requires the project PI to provide the following:
     - Project Description
     - Equipment Site Utilization Checklist
     - Budget for Site Specific Costs
     - Data Archiving and Sharing Plan
     - Dispute resolution process



Equipment Site Utilization Form



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ES Will Provide

- A basic scope of services is available to NEES projects through the O&M budget provided by NSF through the NEES Consortium. The following outlines these services:
  - Assistance in proposal development with regard to the laboratory equipment and infrastructure
  - Laboratory cost estimation for non-NEES equipment
  - Equipment and safety training
  - Material and test specimens receiving
  - Equipment and test setup (each project will be allocated certain personnel time depending on the scope of the project)
  - Video conferencing support
  - Instrument calibration and data acquisition
  - Technical support for data collection and management
  - Office space for external researchers

Researcher Will Provide

- A reasonable, well-defined testing program
- A budget for
  - Specimen fabrication, mobilization, and demolition
  - Any project-specific costs:
    - Equipment modification costs
    - Special instrumentation
    - Additional safety structures
  - GRA support cost (travel, housing, ..)



Facility Access and Recharge Fees

- Each ES provides detailed information about
  - Facility Access
  - Fee Schedule
  - Contact Information

- Information can be found on ES websites



Project Coordination and Scheduling

- ES may see multiple projects simultaneously – not all NEES-related
- Scheduling queue is updated weekly
  - MS Project is used for management & tracking staff assignments and equipment allocated to each project
- Researchers are encouraged to use MS Project for managing their project
- ES tracks and report staff time and effort for each assignment and equipment allocated for each project



Safety

- ES Safety Manuals can be found and downloaded from ES websites
- Project staff will receive safety training
- Project safety plan must be approved by ES before assembly of test specimen



Risk Management

- Although we do not anticipate things to go wrong, but sometimes they do
- To reduce risk
  - A through knowledge of test environment and equipment limitations is required
  - A detailed testing plan is required
- If things go wrong
  - Requires joint effort from site and project PI
  - Prudence, Patience and Hope

Summary for Success

- Good planning (well defined plan)
- Communication among ALL parties
  - ES have weekly meetings
- Technical expertise and oversight
- Management expertise and oversight
- Flexibility (ES and PI)
- Commitment by ALL parties to complete assigned tasks
- Adequate budget



Communication

- Call or Email ES staff if you have any questions
- Communication is the “key” to managing a successful project



Questions?

Thank You !