

NEES Equipment Site Scheduling Protocol
v1.0
January 2012

Final Document

Purpose

The NEES Scheduling Protocol serves to ensure that the scheduling of research projects within the network is well defined, transparent, and minimizes changes in project schedules. This document defines the roles and responsibilities of various parties involved in the project scheduling process. This document also includes a list of the scheduling processes for new and existing research projects (NSF projects, including NEESR projects, and all other projects). Finally, this document outlines methodologies for making scheduling changes and relocating projects, if necessary.

Roles and Responsibilities

Equipment Site – An equipment site is one of the 14 NEES equipment sites supported by NSF under the NEES Operations award to Purdue University (cooperative agreement CMMI-0927178 - <http://www.nees.org>). The responsibilities of the sites revolve around the support of new and existing research projects. To facilitate the scheduling of new projects, the sites are responsible for working with Researchers to complete required forms, to develop detailed experimental testing plans, and to develop project schedules. Because it relates directly to project scheduling, it is vital that the sites ensure, to the best of their ability, that the NEES supported equipment is ready and operational so that research projects are executed and completed in a timely manner. The sites will maintain an up-to-date project schedule posted in the NEEShub and communicate regularly with the Director of Site Operations (DSO) regarding any events that may impact the published schedule. Communication between sites and Researchers will play a significant role in ensuring that projects are executed in a timely manner. Sites are expected to be in regular communication with Researchers informing them of schedule updates and key information. As a project approaches its start date, communication should increase to ensure seamless transition from one project to the next.

Site Operations Managers – Along with the Site PI, the Site Operations Managers are responsible for ensuring that the sites fulfill their responsibilities described in this protocol. Site Operations Managers typically serve as members of scheduling subcommittees.

Site Scheduling Committee (SSC) –The SSC is a venue “to ensure that the scheduling of research projects within the network is well defined, transparent, and minimizes changes in project schedules.” In fulfilling these responsibilities, the SSC develops and implements protocols for scheduling research projects within the NEES Community. The SSC also ensures that NSF schedule reporting requirements outlined in the NEES Cooperative Agreement are being met. The SSC reviews subcommittee recommendations and provides resolution to issues that have not been resolved by the subcommittees. The SSC makes recommendations to the Director of Site Operations regarding project schedule decisions. The SSC will designate an individual to chair and serve as point of contact for the SSC.

The SSC has three subcommittees. The subcommittees are loosely aligned along three broad categories: Geotechnical Sites, Shaker and Tsunami Sites, and Structural Sites. The equipment sites represented on the subcommittees are as follows:

1. Geotechnical Sites comprised of representatives from Cornell, RPI, UC Davis, Texas and UCSB;
2. Shaker and Tsunami Sites comprised of representatives from UNR, UCSD, UCLA and OSU; and
3. Structural Sites comprised of representatives from Lehigh, Illinois, Minnesota, Berkeley and Buffalo.

The subcommittees will review updated schedules for member equipment sites to evaluate project progress and, as needed, to evaluate new project SURFs. The head of each subcommittee will schedule meetings as needed to discuss scheduling issues. Issues that cannot be resolved by the subcommittee are referred to the SSC.

The subcommittees are comprised of one member from each respective NEES equipment site and a User Representative. The site representatives will typically be the Site Operations Managers. However, if able to provide sufficient justification, Sites can propose an alternate representative. The SSC and the DSO grant approval of alternate representatives.

Each subcommittee will establish a chair that will serve as head and point of contact of the subcommittee. These chairs will also serve as the members of the SSC. The User Representatives on the subcommittees will also serve as members of the SSC.

The SSC will meet at minimum, four times per year. The timing of one meeting corresponds with the NSF NEES Research (NEESR) solicitation schedule. The SSC will meet in person at the NEES Annual Meeting. Additional meetings will be held as required. Other than the in-person meeting at the Annual Meeting, all other meetings may be conducted via WebEx.

Director of Site Operations (DSO) – The DSO serves as the central point of contact for scheduling for both the Researchers and the NEES sites. The DSO receives initial requests for site utilization from Researchers via the SURF and reviews and approves recommendations of the SSC. The DSO provides approval of all SURFs, site schedules, and changes to site schedules.

Researchers - Researchers will contact the DSO to make requests for site utilization using the SURF. If the request is approved, the Researcher will work with the Site to develop a detailed ETP for the project, which includes a detailed project scope, required resources (personnel and material) to complete that scope, anticipated project schedule and expected number of days of site utilization. Researchers will be held to the defined scope outlined in the experimental testing plan and will be expected to complete work within the agreed upon schedule. Researchers must realize that once a project is scheduled at a site, NSF support is allocated to that site to support that project. If a Researcher delays the testing schedule, NSF support may not be available for support of that project at the site at a later date and therefore the Researcher may not be able to use that NEES site to complete the project. This means that the Researcher will not make use of the research project support that was provided to use a NEES site and may not satisfactorily complete the planned scope of the NSF award. In this case, the Researcher should contact the cognizant NSF Program Officer.

Site Operations Principal Investigators (PIs) – Site PIs may provide technical review of projects and may be involved in developing expected project durations. Site PIs are typically not members of the SSC. However, a PI may serve on the scheduling committee with approval from the DSO and other members of the SSC.

User Representatives - Three representatives of the NEES research community will be members of the SSC. These individuals will attend the SSC meetings, can provide feedback and advice, and can ensure that the site scheduling meets the needs of Researchers. The NEES User's Forum will appoint these members. User representatives will serve as members of the scheduling committee for a period of two years.

Conflicts of Interest – Members of the SSC or subcommittees who are also a PI, Co-PI, or project participant on a research project conducted at a NEES site being scheduled are required to recuse themselves from decisions concerning the scheduling of their project during committee meetings.

Important Documents

[SURF – Site Utilization Request Form](#)

The Site Utilization Request Form is utilized by Researchers to make an initial request of use of a NEES equipment site.

[ESPCC – Equipment Site Policy Compliance Check](#)

The ESPCC form is utilized by the Site and NEEScomm to document an initial evaluation of proposed projects in the areas of project feasibility, safety, budget, schedule, and data.

[ESUF – Equipment Site Utilization Form](#)

The purpose of the ESUF is to document a planning discussion between a User and the Site. The ESUF identifies a schedule, distribution of responsibilities, experimental costs not covered by normal operation and maintenance costs, and safety issues.

[SUA – Site User Agreement](#)

The Site User Agreement (SUA) addresses contractual issues between a NEES Equipment Site Institution (“Site Institution”) and a User Institution. The SUA is not Researcher or project specific; it serves as the contractual understanding between the Site Institution and User Institution.

[ETP - Experimental Testing Plan](#)

The Experimental Testing Plan is a detailed document that outlines the specific testing that will be conducted at the equipment site. At minimum, the ETP should contain the following items.

- a. Project scope including, for example, details of specimens, fabrication location, erection, instrumentation, data acquisition, testing plans, demolition, etc.
- b. Detailed list of equipment to be used at the NEES equipment site and detailed list of Researcher-provided equipment. The number of days of equipment site use should be included and encompass the entire duration of the experimental activities including, for example, time for fabrication, erection, testing, and demolition
- c. Any project-specific safety requirements
- d. Anticipated project schedule

An example of a completed ETP is provided at the NEEShub Policies and Procedures page (<http://nees.org/aboutnees/policies>).

Scheduling a New Project to the Network (NSF Projects)

Note: For projects planning to use more than one site, the process below must be implemented separately for each site requested.

1. Researchers include SURF with proposal submitted to NSF as a part of supplemental documentation.
2. NSF notifies DSO of potential projects to be awarded and the timeline for completion of the process.
3. NSF notifies selected Researchers of potential awards.
4. Researcher sends proposal and SURF along with request to complete an ESPCC to the DSO.
5. DSO distributes the corresponding proposals and SURF to potential sites.
6. Sites complete an ESPCC for each potential project and return to DSO along with an updated site schedule (should include tentative schedule of project under review).
7. DSO distributes SURFs, ESPCCs and updated site schedules to the appropriate SSC Subcommittees. The Subcommittees review the SURFs and site schedules and make recommendations to the SSC. A SSC meeting will be scheduled once NSF has notified the DSO of all potential awards.
8. SSC reviews SURFs, ESPCCs and site schedule and makes a recommendation to the DSO regarding the tentative schedule.
9. DSO reviews recommendations, provides approval of the SURF and responds to Researcher with an electronic letter, including the ESPCC, concerning the test plans, safety, and budget.
10. Researcher responds to the DSO and NSF in writing acknowledging needed modifications and the impact (if any) on the project budget.
11. Researcher returns documentation to NSF and DSO according to the timeline established by NSF. The process outlined by steps 2 through 11 is estimated to take 4-6 weeks.
12. Once completed, the proposed project is now a “Tentative Project” and has a tentative block of time on the site schedule. This tentative schedule is added to the site’s schedule posted on NEEShub.
13. Researcher works with Site and DSO to complete ETP, ESUF and SUA.

Scheduling of Active Projects (NSF)

14. The Site and Researcher work together to develop a detailed ETP. Once completed, the Site sends the ETP, ESUF, and SUA to the DSO. It should be noted that the ETP, ESUF, and SUA must be completed, submitted, and reviewed prior to any activity at the site. *Note:* Please allow for sufficient time for review. Please ensure that a detailed schedule is included in the ETP.

- An ETP that fails to provide sufficient schedule information will cause potential delay in the review process. The Site examines the impact of the ETP on the schedule, and a revised site schedule is submitted to the DSO with a summary of impacts of the ETP on the overall site schedule and projects in the queue. If there is no impact on the schedule, then no review is necessary by the SSC and the revised schedule is automatically approved and posted. At this time, a project is considered “Active” and has an official start and end date.
15. If there is an impact to the schedule that affects Active projects in the queue, and/or the ability of the Site to complete its testing by September 30th, 2014, then the Site submits a request for revising the site schedule to the DSO. The DSO sends the revised site schedule to the SSC for review.
 16. When there is an impact, the SSC reviews the overall revised site schedule and impacts to Active projects in the queue. The revised site schedule must include written statements of approval from the Site, and the research project PIs for all Active projects that will have their testing schedule impacted. If all impacted parties approve, and there is no impact on completion of testing by September 30th, 2014, the revised site schedule will be automatically approved by the SSC and DSO and the new schedule will be posted on NEEShub. At this time, a project is considered “Active” and has an official start and end date.
 17. If there is an impact on the ability to complete testing before September 30th, 2014 then project relocation would be explored by the Site, DSO, and SSC, or a revision to the ETP requested that provides a plan that can be accommodated within the available time. In the event one or more of the impacted parties does not approve of a schedule change to their project, then the DSO and SSC will recommend a solution that is in the best interest of all parties.

It is imperative for research projects to be conducted in a timely matter across the NEES network. As such, research projects will be limited to the defined project scope as outlined in the ETP. Typically, projects will have to be completed within the time period defined by the official start and end date indicated on the schedule. If necessary, project duration may be extended as outlined in the section below titled Schedule Changes.

Scheduling of Projects not supported by NSF (referred to as Affiliate Projects, e.g. other federal agency projects, state or local agency projects, industry projects)

Affiliate Projects are those projects that do not receive operations support for planning and testing from the NSF NEES Operations award (CMMI-0927178),

1. The Researcher will complete a SURF and the Site will develop an updated site schedule indicating where in the schedule the Site anticipates accommodating the Affiliate Project. The SURF and the updated schedule will be submitted to the DSO a minimum of two weeks prior to any site activity.
2. If a schedule conflict exists, the DSO will convene a meeting of the SSC to review the proposed schedule change.
3. If the duration of the proposed project is greater than 3 months, the SSC will automatically review the proposed schedule change. Individuals submitting such projects should provide sufficient time for the SSC to review the revised schedule.

Schedule Changes

It is the desire of NEES/NSF that the spirit of research and investigation thrive within the network while maintaining fiscal responsibility and maximizing the utilization of the facilities. As such, best efforts will be made to ensure that projects are conducted within the approved start and end dates. However, extenuating circumstances may occur which will require schedule changes. Request for Schedule Changes (made by the Site or Researcher) must be submitted to the DSO.

Note: Please allow for sufficient time for review.

Projects that propose a revision, which satisfies the “grace period condition” (refer to the definition below), will be subject to the Site’s approval only. For all other revision requests, written statements must be submitted to the DSO, including a revised site schedule and written approvals from both the Site and Researcher. If there is no impact to projects in the queue or the ability to complete all experimental testing by September 30th, 2014, then the DSO automatically approves the request for schedule change and the revised schedule is posted.

When there is an impact, the DSO and SSC reviews the overall revised site schedule and impacts to projects in the queue. In this case, the request and revised site schedule must include written statements of approvals from the Site, and the research project PIs for all projects that will have their testing schedule impacted. If all impacted parties approve, and there is no impact on completion of testing by September 30th, 2014, the DSO will approve the revised site schedule and the new schedule will be posted.

If there is an impact on the ability to complete all testing before September 30th, 2014, then the project must be completed within the original allocated schedule or project relocation may be explored. In the event one or more of the impacted parties

does not approve of the schedule change, then the DSO and SSC will recommend a solution that is in the best interest of all parties.

Note: For any revisions made, the ETP has to be updated accordingly and submitted to DSO for filing.

Grace period condition:

In the event of revising the schedule of an experimental phase, if the requested revision is less than 7 calendar days or 10% of the duration of the experiment phase (but no more than 14 days), whichever is larger, the request will be automatically approved by the Site and posted on NEEShub. *Note:* The grace period condition can only be applied once for any individual experimental phase.

Project Relocation

Site Initiated Relocation

1. In certain circumstances it may be possible to relocate a project from one site to another. When the SSC convenes to evaluate projects and site schedules, the committee will also review existing site schedules to determine the feasibility of relocating projects from one site to another.
2. The SSC will make recommendations to the DSO regarding any projects that could be accomplished at different sites or projects that could possibly be relocated.
3. The DSO reviews the recommendation.
4. If the DSO agrees with the recommendation, the DSO will contact the Researcher and the proposed new project Site that is affected to obtain concurrence with the relocation.
5. If the Researcher and proposed Site agree with the change in project location, the DSO will approve the project relocation.
6. The relocation procedure will follow steps 14 and 16 of the NSF Project Scheduling section.

Researcher Initiated Relocation

7. Alternatively, a Researcher may request the relocation of a project. Under this scenario, the Researcher would contact the DSO to request relocation of the project. The request must contain sufficient information to justify the relocation. The Researcher must submit a SURF for the proposed activity at the new site.
8. The DSO will convene an ad-hoc meeting of the SSC if the request cannot be accommodated in the next regularly scheduled meeting of the SSC.
9. The SSC will conduct a review of the request and make a recommendation regarding the proposed relocation.

10. The DSO reviews the recommendation.
11. If the DSO agrees with the recommendation, the DSO will approve the project relocation.
12. The relocation procedure will follow steps 14 and 16 of the NSF Project Scheduling section.

Conflict Resolution

In the event of a dispute between a Researcher and a Site, please refer to Article XIX in the SUA. The SSC will handle all other conflicts and make recommendations to the DSP. If the research project or Site PI(s) disagree with the decision of DSO, an appeal can be submitted to the NEEScomm Deputy Center Director. The Deputy Center Director will convene a committee consisting of the Deputy Center Director, Center Director and the chair of the Equipment Site Forum and the chair of the NEES User's Forum. This committee will review the appeal. This committee may contact the Equipment Site and research project PI for additional information if necessary. The Center Director will take into account the committee's recommendation and consult with the National Science Foundation and make a final decision regarding the appeal.