

SEESL/UB-NEES Site Access Policies

Introduction:

The Structural Engineering and Earthquake Simulation Laboratory at University at Buffalo is the host for the UB-NEES site of the George E Brown Jr. Network for Earthquake Engineering Simulation (UB-NEES) which provide services to the NEES engineering research community. The UB-NEES services are operated with support from NEESinc, which in turn is supported with a grant from the Division of Critical Mechanical Systems of National Science Foundation (NSF/NEES).

The laboratory operates equipment developed with funding from NSF/NSEES which is free of charges for users performing research approved by NEESinc (defined below as NEES research). Moreover, SEESL operates also other equipment purchased with other funding which will be available to all researchers for fees as posted below. It should be noted that all equipment is available for any non-NEES research for fees as indicated in the recharge fees schedule.

The equipment available at SEESL can be assembled in various unique configurations. The equipment can be hazardous to the operators and to the users if used improperly. This Access Plan is intended to provide safe access to equipment and work areas to local and outside researchers. Therefore safety is the primary concern for all access rules, restrictions, and limitations.

This document defines also the types of access to the UB site that NEES researchers will enjoy, identifies constraints and limitations on the access and use of the facility, and finally describes the safety plan of the SEESL/UB-NEES.

Information: UB-Structural Engineering and Earthquake Simulation Laboratory (SEESL):

This section provides a list of facilities, a brief description of equipment available to researchers, either without charge or for a fee, at the UB node of the NEES network hosted by SEESL. A more detailed description of equipment may be found at www.nees.buffalo.edu.

(I) Facilities, equipment and services available to **NEES researchers without fees:**

- (a) Two six-degree of freedom, 50 tons each (100 tons combined) load capacity shake tables – complete performance description see on website www.nees.buffalo.edu.
- (b) Three high-performance dynamic actuators (1000 kN capacity, ± 500 mm stroke, 1 m/s velocity, 800 gpm servo-valves), equipped with load cells and displacement transducers.
- (c) Two static actuators (± 2000 kN capacity, ± 500 mm stroke), equipped with displacement transducers.
- (d) Data acquisition systems with a combined capacity of up to 350 channels.
- (e) An advanced 3D coordinate tracking system Krypton with up to 150 LED targets.
- (f) A 285m² (~300sq.ft) strong floor with 610x610 mm (2 x 2 ft) ties-down grid.
- (g) A 19.5 m by 9 m (60 x 30 ft) strong reaction wall with 610x610 mm (2 x 2 ft) ties-down grid.
- (h) A 6 m x 2.5 m plan x 6 m high (20 x 8 x 20 ft) 1-g Geotechnical Laminar Box for soil-structure-foundation studies at or near full scale
- (i) A Nonstructural Component Simulator (NCS) consisting of two versatile platforms for experimental studies of nonstructural components and equipment under full scale floor seismic induced motions.
- (j) 40-ton and 20-ton overhead Gantry cranes.
- (k) A 4-person capacity collaboration room with tele-observation and tele-participation capabilities (subject to the constraints presented [below](#)), and 4-workstations on the 3rd floor mezzanine
- (l) Room with videoconference capabilities (prior scheduling required: [calendar](#))
- (m) Office space for students (subject to the constraints presented below: scheduling will be done with the [Site Operation Manager](#)).
- (n) Office space for faculty members (subject to the constraints presented below: scheduling will be done with the [Site Operation Manager](#)).
- (o) All computational facilities of the UB-NEES node.

Note that these facilities and equipment are unique and may not always be available due to use on prior projects. Careful planning and scheduling is required.

- (II) Facilities, equipment, and services available to all (including NEES) researchers **for a fee** consist of:
- (a) Accelerometers (total of 63), displacement transducers (total of 70 with capacities ranging from 100mm to 300mm), and load cells (total of 34 with 5 multi-component cells with 200kN axial load capacity and 90kN shear load capacity). - Several instruments will be free of charge for NEES researchers as indicated in the website [LAB MANUAL](#).
 - (b) A third 5DOF-50 tons capacity shaking table with capabilities identical to the new ones (see I(a) above).
 - (c) A small isolation bearing testing machine with 600kN vertical load capacity, ± 150 mm stroke and 0.4m/sec velocity.
 - (d) A large isolation bearing testing machine with 7000kN axial load capacity, ± 125 mm stroke and .25m/sec velocity.
 - (e) Ten hydraulic actuators with 10 to 1000kN load capacity, ± 50 to ± 300 mm stroke and up to 1.75m/sec velocity.
 - (f) Manifolds, controllers, and all equipment needed for the control of the actuators in item (e) above.
 - (g) Two portable data acquisition systems, each of 12 channels capacity.
 - (h) X-Y recorders, frequency analyzers, portable measuring devices, oscilloscopes, digital multimeters, borescopes, thickness measuring devices, roughness measuring instruments, etc.
 - (i) A 30 m³ environmental chamber capable of sustaining temperatures in the range of -40°C to 50°C.
 - (j) A six-story, quarter length scale steel model structure with 200kN weight for use in earthquake simulator testing.
 - (k) A bridge, quarter length scale steel model with 150kN weight and featuring flexible or stiff piers for use in earthquake simulator testing.
 - (l) A versatile, quarter length scale steel model that can be configured in a variety of configurations, including 3-bay, 3-story building and one-bay, 6-story building.
 - (m) Welding equipment, hydraulic jacks, forklifts, rigging equipment, etc.
 - (n) Heavy hand and machine tools.
 - (o) Technical services for assembly of heavy specimens.
 - (p) Instrumentation modifications and calibration services.
 - (q) The University at Buffalo library facilities during the duration of their stay (subject to the limitations listed [below](#)).
 - (r) Parking space at the University at Buffalo parking facilities for a nominal fee (typically less than \$5 per year) over the duration of their stay (subject to the limitations listed [below](#)).

Complete details of the above equipment and services are listed in the [SEESL Lab Manual](#) available at the website: <http://nees.buffalo.edu/> The current [fees schedule](#) is posted in the Lab Manual and are attached also to this document. For fees are not available in the schedule, a user should contact the [Site Operations Manager](#).

Note that these facilities and equipment may not always be available due to use in prior projects. Careful planning and scheduling is required.

Key Contacts at SEESL / UB-NEES:

The key personnel* in charge with the operation of the SEESL / UB-NEES services for the 2004-2014 period are:

Michael Constantinou	Director and Principal Investigator	716-645-2469
Amjad Aref	Deputy Director and Safety Coordinator	716-645-4309
Tom Albrechcinski	Site Operations Manager	716-645-3019
Mark Pitman	Technical Services Manager	716-645-4377
Goran Josipovic	Information Technologies Services Manager	716-645-3491
Duane Koslowski	Field Safety Officer	716-645-2217

** While the positions of the key personnel will remain same for the first ten years of operation of SEESL / UB-NEES organization, the actual people holding those positions may change periodically. Check the website for periodic updates.*

The mailing address of SEESL is:

Structural Engineering and Earthquake Simulation Laboratory (SEESL)
Department of Civil Structural and Environmental Engineering
212 Ketter Hall, University at Buffalo, Buffalo, NY 14260-4300

More information about access to the site and updates of addresses and phone numbers see periodically at <http://nees.buffalo.edu/>

Business Calendar/Hours

The SEESL laboratory follows the official schedule of University at Buffalo, including its holiday schedule. The laboratory is operating 5 days a week between 8:00 am to 4:30 pm. Work after hours or weekends may be possible in special cases with prior approval of [Site Operation Manager](#). Special safety restrictions and requirements will apply to such scheduling.

Project Planning / Work Plan:

All researchers planning to access the SEESL/UB-NEES site must follow the NEES Inc guidelines for access of research facilities developed by the NEES Site Operations Committee. The following are minimum requirements for the access of SEESL/UB-NEES site:

The key element to safe and efficient use of the SEESL equipment, the lab space and the associated facilities is the project **WORK PLAN**. A detailed **WORK PLAN** will need to be prepared by all researchers in NEES and non-NEES projects that should be approved by the [Site Operation Manager](#) prior to any project related work occurring in the SEESL. The work plan will be incorporated into a contractual agreement between the NEES and non-NEES researchers and the University at Buffalo in behalf of SEESL for the research project and will be the governing document to control the project as it moves through the facility.

During the award process the researchers must submit the **WORK PLAN** indicating the test set-up, the equipment and instrumentation required, the testing protocol intended, the specimens removal actions, detailed information concerning the individual work tasks to be performed, the duration of the tasks, the order in which the tasks are performed, identification of who will perform the tasks, and the resources required to perform the tasks. and a comprehensive schedule with milestones related to the project schedule. The plan should cover also needs of data management, and archiving information. The following is an itemized list of issues to be covered by the **WORK PLAN**:

1. A list of tasks to be performed
2. Specimen and fail safe system drawings
3. Calculations of the specimen and failsafe system
4. An instrumentation plan
5. A testing plan
6. List of equipment, materials, supplies, tools and personnel to carry out the work tasks

7. Space requirements including lab and office space
8. A rigging plan including disposal of specimens after testing
9. A plan for data management and IT requirements
10. Schedule of tasks including duration and timing

All experiments to be performed using the SEESL/UB-NEES equipment should be carefully planned to assure safety of equipment, operators, and all other users of the laboratory. All researchers should develop detailed plans for the tests set-ups which must include provisions for fail safe of experiments and equipment. Detailed construction plans for all specimens and test fixtures designed by the visiting researchers must be provided. The plans must include detailed design of **the fail-safe system**. Each testing arrangement and specimen must be reviewed and certified (stamped) by a Professional Engineer with experience in dynamic testing (or with demonstrated equivalent qualifications). The SEESL/UB-NEES [Site Operation Manager](#) (OM) will review **completeness** of submittal. The [Site Operation Manager](#) will work with the visiting researchers and review the testing plans and help the visiting researchers demonstrate and document that their testing apparatuses satisfy the OSHA, State and Campus safety requirements. The [Site Operation Manager](#) will be the point of contact and provide the additional information needed by the visiting researchers and review teams to develop their plans. Note the safety of the test set-up and the equipment will remain the responsibility of the researcher.

The researchers will have to negotiate with the NEES Inc. staff a schedule which will be jointly agreed with the UB-NEES Site. For any excess of time needed beyond the negotiated schedule with NEES Inc., fees for use of UB-NEES facility will be charged at rates charged to Non-NEES projects. The scheduling for NEES researchers will be negotiated with the NEESinc Operations Manager and with the SEESL / NEES Site Operations Manager. Non-NEES researcher will negotiate their schedule directly with SEESL [Site Operation Manager](#).

Once activity begins in the SEESL/UB-NEES facility, the researcher (NEES or non –NEES) must update the **WORK PLAN** weekly and submit any changes for review and approval by the [Site Operation Manager](#).

Failure to follow policies regarding safety or **WORK PLAN** will result in the following consequences:

- First offense – verbal reminder
- Second offense – written notification of out of scope work or safety violation to researcher (NEES or non-NEES)
- Third offense – suspension of work and a mandatory safety review or **WORK PLAN** review. Results of the review of NEES research projects will be submitted to the NEESinc for further action. Non-NEES research may be interrupted directly by SEESL management.

Lab Personnel have the right to stop, alter, or refuse any task or operation of any piece of equipment that is being performed by any Lab User.

Safety Requirements:

Laboratory safety is of the highest priority at the SEESL/UB-NEES facility which is part of SEESL. The combination of large load, high speed testing capability with the testing of large specimens to failure at SEESL/UB-NEES, requires special measures for safety.

The CSEE Department has in place a [SAFETY PLAN](#) that covers the operations of the SEESL/UB-NEES facility. This [SAFETY PLAN](#) requires safety training of all employees, students and visitors. Moreover, it requires periodic inspection of laboratories and other spaces for identification of unsafe conditions and for instituting corrections. The SEESL/UB-NEES [Site Operation Manager](#) (OM) is the responsible person for implementing the [SAFETY PLAN](#) and for coordinating the training of employees, students and visitors in the NEES facility. The SEESL [Deputy Director](#) is in charge with development of rules and policies or resolving safety issues in absence of such policies which cover all operations of UB-NEES Site. A [Field Safety Officer](#), who serves on the technicians staff of the laboratory, serves as the floor supervisor. The safety implementation staff is empowered to suspend work or visit of any person who does not comply with the safety requirements.

All researchers (either short or long term) must undergo safety training prior to starting work in the laboratory. The training may start at the home institution by studying the CSEE [Safety Training Manual](#) (available on the

website: <http://nees.buffalo.edu/> . Upon arrival to SEESL / UB-NEES, the research visitors must take the 6-hour training class, which includes a walk through the facilities and an examination (described below). Each person will be issued a certificate for accessing the facility.

All researchers planning to work in the laboratory must wear personal protection equipment (PPE), which includes:

- **Hardhats** are mandatory for all who access the testing floors in the laboratory. Hardhats are not required on the observation deck at third floor.
- **Steel toe boots** are required in all areas of the testing floors. Safety shoes are not required on the observation deck.
- **Gloves** are required whenever assembling or disassembling test specimens or test fixtures.
- **Eyeglasses** are mandatory when grinding, impacting, drilling, mixing, or hammering.
- **Earplugs** or earmuffs are recommended and available from Lab Personnel when grinding, impacting, or drilling.
- A personal **safety harness** shall be used when required by Lab Personnel.

The laboratory will provide for short term visitors hard hats, gloves, eye protection goggles, earplugs and safety harnesses. Safety Shoes should be provided by the researchers.

Insurance and Liabilities:

Employees and students of the University at Buffalo who completed safety training are covered by the university's global insurance against injuries that may result from work in the SEESL/UB-NEES facility. This does not apply to NEES or non-NEES researchers from other institutions, who perform research at the SEESL/UB-NEES facility.

Visiting researchers must carry an [insurance certificate](#) from their home institution. Each visiting researcher shall provide prior to the work at SEESL/UB-NEES a certificate of insurance before access is permitted to the NEES facility. The insurance shall cover personal injury and injury to others that the researcher is responsible, and damage to equipment that is caused by the researcher.

The researchers must agree to hold UB and the UB faculty and staff of the SEESL/UB-NEES node harmless for any acts, errors, omissions, and negligence. A [release form](#) to be signed by the researcher or their HOME INSTITUTION is attached to this document.

Access to Facilities:

NEES researchers will enjoy the following privileges during the duration of the part of their project that is executed at SEESL /UB-NEES (Other researchers may have similar access if space permits).

- (a) Access to the physical site, laboratory areas and equipment, listed in Section on [Information on SEESL – UB-NEES](#) (above) are subject to the constraints listed in Section on [Constraints and Limitations](#) (below). These constraints consist of the requirements that the researchers receive safety training at SEESL/UB-NEES, and have a certificate of insurance that covers accidents in the laboratory and includes medical expenses and liability. See section on [Safety Requirements](#) above.
- (b) Office space for **two students** per project over the period of specimen preparation, testing and removal at SEESL / UB-NEES. The office space will be in the shared collaboration room, which is wired to the UB-NEES computational facilities, and is equipped with a number of computers. Space for additional students per project may be provided if necessary for the project duration depending on availability of space. (to be arranged with the [Site Operation Manager](#))
- (c) Office space for one faculty member or post-doctoral fellow per project over the period of specimen preparation, testing, and removal at SEESL / UB-NEES. The office space will either be in the shared collaboration room or in a faculty office and shared with another visitor. Space for additional visitors per project may be provided if necessary for the duration of the project depending on availability of space (to be arranged with the [Site Operation Manager](#))
- (d) Faculty and students (long term) visitors who are US citizens or permanent residents may be appointed as non-paid visiting faculty and non-paid visiting scholars, respectively. This will allow the issuance of a parking permit for a nominal fee (about \$10 per year) and a UB identification card, which will provide library access privileges, campus transportation privileges and ease in accessing the department's and the NEES facilities. (to be arranged with the [Site Operation Manager](#))

- (e) Faculty and students visitors who are not US citizens or permanent residents cannot be appointed in non-paid visiting positions due to restrictions imposed by the Department of Homeland Security. (to be arranged with the [Site Operation Manager](#))
- (f) These visitors will be issued CSEE department and NEES controlled electronic access cards to the department's facilities and the NEES collaboration room only. Parking space for these visitors must either be purchased at the UB visitors parking area or parking meters must be used. (to be arranged with the [Site Operation Manager](#)).
- (g) Access to all computer facilities of the SEESL/UB-NEES node will be provided, including wireless access to the internet and to their home institution computing facilities via high speed fiber-optic lines. Access to other Campus computing will be available to long term visitors only (see (d) above)
- (h) All NEES researchers will be assisted by the [Site IT Services Manager](#) in using the local and national NEESgrid networking capabilities, in data packaging and archival. The [Site IT Services Manager](#) will facilitate and provide instructions, access capabilities, and workspace in the local repositories for all researchers. The [Site IT Services Manager](#) will not perform the actual data management and archival which will remain the responsibility of the researcher. A Data Archiving and Sharing Plan will have to be submitted for review to the [Site IT Services Manager](#) prior to completing the preparation of the agreement and WORL PLAN as indicated above. (see more details in the section on [Access Information](#) below)

Access Constraints and Limitations:

Access for NEES and non-NEES researchers to the UB-NEES node facilities is subject to the following constraints and limitations:

- (a) All researchers (either short or long term) must undergo safety training prior to starting work in the laboratory. The training may start at the home institution by studying the CSEE Safety Training Manual (available on the website: <http://nees.buffalo.edu/> . Upon arrival to SEESL / UB-NEES, the visitors must take the 6-hour training class, which includes a walk through the facilities and an examination (described below). Each person will be issued a certificate for accessing the facility.
- (b) All researchers planning to work in the laboratory must wear personal protection equipment (PPE), which includes hard hat, steel-toed shoes, gloves, eye protection goggles, or glasses with synthetic lenses, hearing protection devices and respirators. (see more details in the section on [Safety Requirements](#) above)
- (c) All must obey the safety rules. Failure to comply and failure to obey the directions by the laboratory personnel will result in denial of access to the SEESL (including NEES) and other CSEE facilities. In case of non-compliance the Field Safety Officer will provide one warning, followed by immediate ejection from the laboratory if error is not corrected. Safety in Laboratory is the primary concern. Non-compliance may endanger the researchers and the lab personnel and cannot be tolerated.
- (d) The number of visiting researchers is limited to two students and one senior personnel per project for the duration of the project as described in section on [Access Information](#) (above). However, more visitors per project may be accommodated on the basis of availability of space to the maximum capacity of the NEES collaboration room and the availability of CSEE space for faculty visitors.
- (e) All researchers and visitors accessing the testing floors must be insured to cover personal injury, medical expenses, injuries to others that they may cause and damage to equipment that they may cause. Certificates of insurance must be presented to the [Site Operations Manager](#) or the [Field Safety Officer](#) before accessing the facility. (see section on [Insurance](#) above)
- (i) All researchers and visitors must agree to hold UB and the UB faculty and staff of the SEESL/UB-NEES node harmless for any acts, errors, omissions, and negligence. (see also [Liability](#) above)

Special Access Information

The following are excerpts from the [Lab Safety Manual](#). The requirements listed below are intended to provide a short - select itemized list of "do and do not"s.

(a) General Requirements

- Access in the laboratory is permitted when at least one other person is in the laboratories, which is informed of your presence and is in eye or communication contact with you at all times.

- Know where First Aid Kit, Eye Wash Station, Fire Exits, Fire Extinguishers, and Electrical Disconnects are located.
- Know the location of emergency phones and emergency shut off buttons for the hydraulics. Use them at the request of lab personnel or in their absence using your best judgment.
- Keep walkways (which are marked with crosshatched yellow tape) clear of all obstacles at all times.
- Do not block fire extinguishers or electrical panels.
- Clean up work area daily.
- If your work will generate dust, cover sensitive equipment before you start, and clean up the dust. Dust cleaning equipment available in the laboratory.
- At end of testing remove safely the specimens as agreed in the WORK PLAN. The researcher remains responsible of all removal operations till its end.

(b) Testing Areas

- When red strobe lights are flashing, the hydraulic system is active and testing is in progress. Unauthorized personnel should not approach within 10 feet of any hydraulic line, shake table, actuator, or test specimens. Authorization may be obtained from the lab test supervisor.
- The authorized personnel attending a live experiment must be equipped with a communication device provided by the Technical Services Manager and stay in communication with the test supervisor.
- All other project work may be limited by Lab Personnel on a test day.
- All personnel accessing the spaces under the testing floor and the service rooms in the basement must remain in communication contact with a lab supervisor working above the floor

(c) Cranes, Forklifts, Scissorlifts

- Cranes, Forklifts, and Scissorlifts may not be used unless the operator has been trained and certified by Lab Personnel.
- Heavy and/or large items are to be craned and rigged only by Lab Personnel.
- Avoid crane use above hydraulic actuators, controllers, data acquisition systems or hydraulic systems without proper help for a second person.
- Cranes shall not be left unattended while still attached to a specimen or test fixture.
- Scissorlifts must be operated / attended by a team of two users at one time.

(d) Laboratory Equipment

- Do not use any power tool unless approved by Lab Personnel.
- Do not move or modify any hydraulic actuator, accumulator, or hydraulic line. This can be done only by authorized lab personnel.
- Use of the welder or blow torch is not allowed. This can be done only by authorized lab personnel.
- All tools must be inspected before use and any defect reported to Lab Personnel.
- Return tools to the proper location at the end of each working day and when the job is complete.
- Do not use any prestressing Jacks. This can be done only by authorized lab personnel.
- Ladders must be properly positioned and/or tied off.

(e) Access to Tools

- The SEESL Laboratory has tools (hand tools, power tools, air tools, and welding tools) that are available to NEES researchers who have paid the user fee.
- The recharge rates are identified in the master agreement between SEESL and the NEES researcher. Recharge rates are updated annually. (see section on [Recharge Fees](#))
- Current recharge rates can be found on the SEESL website.
- Power tools can be checked out of the Equipment Room on a daily basis, while the hand tools will be available in a kit that can be checked out for the duration of a SEESL project. NEES researchers will be responsible for returning all tools to the Equipment Room in operable condition.
- The NEES project will be responsible for replacing any lost hand tools.
- The electric welder and/or cutting torch may be used by qualified professionals who are hired on a subcontract basis to either fabricate or demolish test specimens. In such cases, prior approval from the Operations Manager must be obtained.

- The subcontractor wishing to use this equipment will be required to verify professional qualifications and prior experience.

(f) Access to Instrumentation

- Instrumentation purchased through NEES is available for free use by NEES researchers. A complete list of NEES instrumentation is identified on the SEESL/UB-NEES Lab Manual. Additional instrumentation may be available for a fee.
- For safety reasons, only SEESL staff are allowed to operate much of the SEESL Laboratory equipment. Examples of this equipment include: hydraulic equipment (e.g., pump, manifolds, controllers, actuators and hoses), forklift, scissors lift, electric arc welder, oxygen-acetylene cutting torch, and all computing equipment (except as outlined in the Access to IT Section), cameras (except as outlined below), and associated cabling (except as outlined below). This policy will be enforced strictly. The only exceptions are use of the electric welder and/or cutting torch (as described in the Access to Tools Section), and data sensors and lighting not attached to robotic arms.
- NEES and Non-NEES data sensors (e.g., linear variable differential transformers, string pots, and other reusable sensors not purchased with project funds), lighting equipment and associated cabling may be checked out of the Equipment Room for the period of time identified in the work plan schedule.
- Calibration of this equipment must be done by the NEES researchers, where needed. SEESL staff will remove and return all reusable NEES and Non-NEES instrumentation, lighting, and associated cabling.
- Video and still image cameras and associated equipment, including robotic arms are to be installed only by SEESL Laboratory personnel. SEESL staff will also remove and return all cameras and associated equipment. However, video or still image cameras can be checked out of the Equipment Room on a daily basis during operating hours for short-term use.

(g) Access to the SEESL Controllers

- For safety reasons, only SEESL staff will be allowed to operate the Shake Tables controllers and the STS controllers.
- NEES researchers may have access to the other SEESL controllers for various actuators (see list in the LAB MANUAL) after proper training by lab personnel and with their daily approval.
- NEES Researchers will have access to the Hybrid Testing System after proper training by the lab personnel with assistance of the Lab Technical Staff.

(h) IT Access

- The SEESL/UB-NEES Laboratory is outfitted with a variety of data acquisition, archiving, and telepresence equipment, including sensors (e.g., load cells, transducers, and cameras), servers, appliances, and cabling.
- Access to all computers is restricted to SEESL personnel with the exception of the data acquisition servers, client machines, SEESL Local Data Repository, and video-teleconferencing equipment (personal computers will not be provided by the SEESL to NEES researchers).
- Accounts on the data acquisition servers, client machines, and the SEESL Laboratory Local Data Repository will be provided to NEES researchers by the [Site IT Services Manager](#) on an as-needed basis after training on the equipment is completed.
- The SEESL is linked to computational facilities associated with the NEESgrid. Use of those facilities is administered by the NEES Consortium, Inc.
- The SEESL is connected to the NEES Data Repository. Access to the NEES Data Repository, including curation services, is administered by the NEES Consortium, Inc. SEESL staff will facilitate access to the NEES Data Repository as needed.
- All results and metadata for experiments and simulations conducted within the SEESL will be stored on the SEESL Local Data Repository for a minimum of three months (automatically) and up to a maximum of six months after the termination date of the SEESL research agreement for the pertinent project. Storage requests for a longer period of time than the minimum must receive approval from the Operations Manager.
- The SEESL staff will facilitate access to the SEESL Local Data Repository. However, SEESL staff will not provide curation or data reduction services for a project.

Resources

An agreement prepared before the work can start at SEESL/UB_NEES developed between the SEESL and the researchers' HOME INSTITUTION will establish the NEES resources to be utilized in the laboratory work and the non-NEES resources required for the completion of the research. If the latter are required the agreements will include a detailed description of the fees, and a payment schedule. The agreement will be signed by the financial officer of the visiting researcher's HOME INSTITUTION and the SEESL representative (a member of the Sponsored Programs Administration of University at Buffalo)

Schedules

The SEESL / UB-NEES is a shared facility which provides services to many entities. The SEESL is committed to share all the NEES equipment and facility up to 50% as required by the Management Operations and Maintenance (MO&M) contract with NEESinc and NSF/NEES. In order to accommodate all projects a carefully developed schedule agreement between the researcher and SEESL is required. At the request of the researcher the Site Operations manager will develop a schedule which will have to be coordinated with NEESinc (for NEES projects) or with the SEESL Director (for non-NEES projects). The schedule will be then included in an agreement as indicated below. The schedule will include all elements requested in the [Work Plan](#)

Failure to obey the agreed schedule may result in additional fees at non-NEES rates for the exceeding period (applied to all researchers). The agreement will include assurances that such fees will be paid to SEESL. In case of major slip in schedule the work may be indefinitely postponed and a new schedule will have to be negotiated jointly with NEESinc and the Site Operations Manager.

Recharge Rates - Fees

The use of the SEESL equipment by either NEES or non-NEES researchers require budgeting according to rates approved by University at Buffalo.

For NEES sponsored projects the majority of operation and maintenance costs are anticipated to be covered by the NEES O&M contract between NEES and the University at Buffalo. The O&M contract will not be finalized until NSF approves the overall NEES budget request, consequently this affect the recharge fee for NEES services.

If NEES fully funds our O&M proposal and its amendments, no recharge fee would be needed for tools and rigging equipment. However if these items are not fully funded the SEESL/UB-NEES will charge a minimum of \$1500 a month for lab space, riging equipment and tools.

Until budgets are finalized researchers should assemble proposals with a \$1500 a month fee for tool use etc.

If NEES or other non-NEES "fee free" projects exceed the time allocation in the agreed schedule, the researchers will be charged fees as for non-NEES projects

The [Recharge Fees Schedule](#) for all users is available from the webpage <http://nees.buffalo.edu/> and is updated periodically.

Agreements

An agreement should be developed between the visiting researcher's HOME INSTITUTION and SEESL represented by a member of the Sponsored Programs Administration or another representing agency. The agreement should address all the rules and requirements of this document. The list below summarizes the issues to be addressed by the agreement:

- 1) Work Plan (including the requests for equipment, space, personnel)
- 2) Safety requirements
- 3) Insurance and liability
- 4) Access to facilities
- 5) Resources needed and budget recovery mechanism
- 6) Schedules

The agreement can follow the attached [template / boilerplate](#) with additional information and /or modifications. The agreement can be developed with the assistance of the [Site Operations Manager](#) and other key Lab Personnel. The agreement must be signed prior to the start of actual work at SEESL/UB-NEES

Laboratory Access by Visitors and Groups

- All visitors must be accompanied by a University host such as a member of the University Administration, Dean's Office, Engineering Faculty, and MCEER personnel. Active research students may also act as hosts.
- Advance notice of any visit should be given to [Site Operations Manager](#), whenever possible.
- Host must notify [Technical Services Manager](#) immediately on arrival in Laboratory.
- All visitors must read the abbreviated minimum safety instructions and sign the visitors book acknowledging receipt of such instructions
- Visitors are not permitted in the basement unless they have express approval of [Technical Services Manager](#) on each occasion.
- Visitors are not to be allowed on testing floor unless you have express approval of [Technical Services Manager](#)
- Notify the [Site Operations Manager](#) about details of any visit (name of group, size, date and time of visit) with a request to update visitor database.