

Advanced Photon Source

User Policies and Procedures

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User Electrical Equipment Inspections

Changes made in this revision:

- Updated first three paragraphs on page 2

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User Electrical Equipment Inspections

To help ensure the safety of personnel and the protection of equipment, electronic and electrical equipment brought to the APS by users shall be inspected to ensure compliance with NEC, OSHA, DOE, and ANL electrical standards. The inspection must be performed by an Argonne Designated Electrical Equipment Inspector (DEEI) before the equipment can be used.

In some cases, this inspection may be quite simple. Examples include equipment certified by a Nationally Recognized Testing Laboratory (NRTL) and used for its designed purpose, equipment that has previously undergone DEEI inspection, and equipment manufactured by certain vendors. But in many cases equipment will require a thorough internal and external inspection.

Standards outlined in the ANL Electrical Safety Manual apply to all electrical equipment, equipment setups, inspections, and operation at the APS: [Electrical Safety Manual](#) | MyArgonne (anl.gov)

Inspection Needed?

When a user seeks to work at the APS, they complete an Experiment Assessment Form (ESAF).

On the ESAF equipment page, if the user checks-off that they will be bringing electrical equipment, including high voltage supplies or electric ovens, to the APS, they will need to complete an electrical inspection page. This inspection page will guide the user to identify if an inspection is required

Scheduling an Inspection

If an inspection is required, it can be requested on-line on the inspection page.

It is the responsibility of the user and the beamline staff to contact a DEEI or the User Safety Officer and arrange for an inspection at least three (3) business days in advance. Inspections will normally be performed during regular business hours. Requests with less than three days' notice or for inspections not during regular business hours will be dealt with on a case-by-case basis.

The submitted electrical equipment information from the ESAF will be made available to APS DEEIs

If the request is received less than three (3) days in advance, it may not be possible to schedule the inspection at the date and time requested.

DEEI coverage cannot be guaranteed weekdays before 8:00 AM or after 5:00 PM, or on Saturdays, Sundays, and holidays. Requests for DEEI inspections during these times will

be handled as staffing allows, may not be accommodated if made less than three (3) days in advance, and may involve overtime charges for which the requesting user will be responsible. It is strongly recommended that the users arrange travel and shipping such that equipment is available for inspection during normal business hours.

If the inspection finds that the equipment does not meet electrical safety standards, it may not be used at the APS until the deficiency has been corrected. While the host beamline and the APS may assist the user, it is the user's responsibility to rectify the deficiency. Users will be financial responsible for services provided by non-APS personnel, overtime costs for APS personnel, and the costs for APS-supplied parts.

Users with electrical equipment that has not been DEEI inspected may not proceed with any portion of an experiment requiring that equipment. This prohibition may result in a loss of scheduled beam time.

The inspecting DEEI will record inspections according to Laboratory procedures.

4 FEEDBACK AND IMPROVEMENT

If you are using this procedure and have comments or suggested improvements for it, please go to the [APS Policies and Procedures Comment Form](#)^{*} to submit your input to a Procedure Administrator. If you are reviewing this procedure in workflow, your input must be entered in the comment box when you approve or reject the procedure.

Instructions for execution-time modifications to a policy/procedure can be found in the following document: Field Modification of APS Policy/Procedure ([APS 1408152](#)).

^{*} <https://www.aps.anl.gov/Document-Central/APS-Policies-and-Procedures-Comment-Form>