Unless otherwise specified in a special award condition of the cooperative agreement, or as modified below, the Cooperative Agreement Financial & Administrative Terms and Conditions (CA-FATC) dated May 12, 2023 are applicable to this cooperative agreement or cooperative support agreement. When the Modifications and Supplemental Financial & Administrative Terms and Conditions for Mid-Scale Research Infrastructure Projects dated May 12, 2023 or an award notice reference a particular section of the Research Infrastructure Guide, then that section becomes part of the award requirements through incorporation by reference.

Modifications to the Cooperative Agreement Financial & Administrative Terms and Conditions

The CA-FATC are modified for Mid-Scale Research Infrastructure awards as follows:

Article 6. Equipment, paragraph a, and c.1 are deleted in their entirety and replaced with the following for awards that are over $20 Million:

a. Title to Equipment

Unless otherwise specified in the cooperative agreement, title to equipment purchased or fabricated with NSF award funds will vest in the awardee upon acquisition. Such equipment is subject to the full range of acquisition, use, management, and disposition requirements of 2 CFR §200.313. The awardee holds title to the property in trust, consistent with 2 CFR §200.316, unless and until the expiration of 120 days from the award end date and providing the government has not exercised its conditional interest as further described in paragraph b.7.

c. Reporting Requirements for Federally-owned Property

In the event that title to equipment is vested in the Federal Government, such Federally-owned property (FOP) must be identified, tagged or segregated in such a manner as to clearly indicate its ownership by the Federal government. Unless otherwise provided in the award, such FOP must be used only for the performance of the project. An annual inventory report must be submitted in accordance with paragraph 1. below and a physical inventory of FOP must be conducted every two years pursuant to 2 CFR §200.313(d)(2).

1. Annual Inventory Report for Federally-owned Property

(a) Submission Requirement: The awardee must submit an annual inventory report by NSF award number for all FOP having an original acquisition cost of $5,000 or more in accordance with 2 CFR §200.312(a). The annual inventory report should be submitted to the NSF Property Administrator, Division of Administrative Services (DAS), no later than October 15 each year using the NSF Central Property Inventory Repository (CPIR) system.
(b) Content of Annual Inventory Report: The report should include the below information for all FOP purchased or constructed under the award, including land and buildings, inclusive of all subawards. In addition, the report should include any FOP acquired through the General Services Administration (GSA) Federal Excess Personal Property Utilization Program and the Federal Surplus Personal Property Donation Program. In the event that the awardee is in possession of FOP under multiple awards, the reporting must be specific to each NSF award number. The awardee may use the Office of Management and Budget (OMB)-approved Post-Award Reporting forms for Tangible Personal Property (Standard Form (SF)-428, SF-428A, SF-428B, SF-428C, and SF-428S) accessed on the Grants.gov website.

Required inventory information:

• description of the property;
• serial number or other identification number;
• cost of the property;
• acquisition date;
• use and condition of the property;
• the source of funding for the property (including the Federal Award Identification Number (FAIN));
• who holds title;
• percentage of Federal participation in the project costs for the Federal award under which the property was acquired;
• the location; and
• any ultimate disposition data including the date of disposal and sale price of the property.

Article 34. Termination and Enforcement, paragraph e. is replaced with the following:

e. Within 120 days of the termination date, the awardee will furnish a summary of progress under the award and an itemized accounting of costs incurred prior to the termination date or pursuant to d., above. Final allowable costs under a termination settlement must be in accordance with the terms and conditions of the award, including this Article, and the governing cost principles, giving due consideration to the progress under the award. In no event will the total of NSF payments under a terminated award exceed the award amount, or the NSF pro rata share of the total project costs when cost sharing was anticipated, whichever is less.
**Supplemental Financial & Administrative Terms and Conditions**

The CA-FATC are supplemented with the following additional terms and conditions for Mid-Scale Research Infrastructure Projects including those funded as part of Federally Funded Research and Development Centers or associated with existing Major Facilities as follows:

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**64. Contract Requirements**

a. NSF will exercise its responsibility for oversight and monitoring of procurements, contracts, or other contractual arrangements for the purchase of materials and supplies, equipment or general support services under the award. The procedures set forth below must be followed to ensure that performance, materials and services are obtained in an effective manner and in compliance with the provisions of applicable Federal statutes and executive orders.

The awardee must obtain written approval from the cognizant NSF Grants and Agreements Officer prior to entering into a contract if the amount exceeds $250,000 or other amount specifically identified in the agreement. Contracts clearly identified in the NSF award budget are considered approved at the time of award unless approval is withheld by the cognizant NSF Grants and Agreements Officer. Contracts must be clearly identified in the NSF award budget on Line G6. Other. The threshold noted above also applies to cumulative increases in the value of the contractual arrangement after initial NSF approval. The awardee must not artificially segregate its procurements to lesser dollar amounts for the purpose of circumventing this requirement.

A request to enter into a contract must include, at a minimum:

1. proposed contractual arrangement document;
2. a description of the supplies or services required;
3. identification of the type of contract to be issued;
4. the proposed price and the recipient's cost or price analysis;
5. identification of the proposed vendor, an explanation of why and how the proposed vendor was selected, and the degree of competition obtained; and
6. if the contract was awarded without competition, the request to enter into a contract must include a detailed justification.
b. Assignment

The awardee must insert a clause in all contracts subject to this article reserving its right to assign the contract to a third party should a successor awardee be selected by NSF.

The awardee must flow down appropriate provisions of the applicable CA-FATCs, and any special conditions included in the agreement must be included in the contract(s).

c. Notification to Proceed

NSF must review proposed activities and estimated costs for compliance with 2 CFR §200, and agency and award specific requirements. Approval of the request does not constitute a determination by NSF of the allowability of any cost under the contract. Note: The review of contracts is necessary for verifying estimated costs and proposed activities and ensuring compliance with the terms and conditions of the award. NSF will not review the agreements for legal sufficiency.

65. Financial Statement Disclosure of Federally-owned Property

If the cognizant NSF Program Officer has designated real property and equipment as Federally-owned property (FOP), the awardee must disclose the total book value of individual FOP assigned to its custody under this award as a separate line item in the balance sheet and/or as a footnote in the audited financial statements. The listing should include all the designated FOP purchased or constructed, including land and buildings under the award or acquired by screening excess through the General Services Administration (GSA). It should also include Construction-in-Progress (CIP) or Work-in-Progress (WIP) totals for each piece of FOP. CIP is defined as real property that is in the process of being manufactured or fabricated but is not yet complete. WIP is defined as equipment that is in the process of being manufactured or fabricated but is not yet complete. CIP and WIP consist of the costs of direct materials, direct labor, direct purchased services, and indirect costs, including general and administrative and overhead costs. Costs coded CIP or WIP should not be depreciated.

No other real property or equipment acquired under another Federal award or entity should be included as part of this award reporting. This requirement does not supersede any financial reporting requirements required by the Financial Accounting Standards Board or American Institute of Certified Public Accountants.

Book value is defined as the original cost of the asset less any depreciation or amortization expense incurred as of the audited Balance Sheet date. The Financial Statement Disclosure of Federally-owned property must be reported as required by Subpart F—Audit Requirements 2 CFR §200.500 - §200.520. The mailing address is: Federal Audit Clearinghouse, Bureau of the Census, 1201 E. 10th Street, Jeffersonville, IN 47132 and the web address is: https://facweb.census.gov/uploadpdf.aspx.
66. **Information Security**

Security for all information technology (IT) systems employed in the performance of this award, including equipment and information, is the awardee’s responsibility. Within 90 days of the award start date, the awardee must provide a written summary of the policies, procedures and practices employed by the awardee as part of the awardee’s IT security program, in place or planned, to protect research and education activities in support of the award.

The summary should describe the information security program appropriate for the project including, but not limited to: roles and responsibilities, risk assessment, technical safeguards, administrative safeguards, physical safeguards, policies and procedures, awareness and training and notification procedures in the event of a cyber-security breach. The summary should include the awardee’s evaluation criteria that will measure the successful implementation of the IT Security Program. In addition, the summary should address appropriate security measures required of all subrecipients, researchers and others who will have access to the systems employed in support of this award.

The summary will be the basis of a dialogue which NSF will have with the awardee, directly or through community meetings. Discussions will address several topics, such as, but not limited to: evolving security concerns and concomitant cyber-security policy and procedures within the Government and at the awardee; available education and training activities in cyber-security; and coordination activities among NSF awardees.

67. **Environmental and Historic Preservation Compliance**

The awardee acknowledges that NSF, as a federal agency, must satisfy its compliance obligations under federal environmental laws, including the National Environmental Policy Act, 42 USC §§ 4321, *et seq.*, the National Historic Preservation Act, 54 USC §§300101, *et seq.*, and the Endangered Species Act, 16 USC §§1531, *et seq.* The awardee must cooperate to the fullest extent possible with NSF’s efforts to meet those obligations for any proposed activities warranting such compliance. The awardee will ensure that any contracts made under this award will be subject to this same condition.

The awardee must not undertake any activity that may be subject to federal environmental laws until NSF has satisfied its environmental compliance obligations, as evidenced in writing by the cognizant NSF Grants and Agreements Officer. In the event that any cultural or historic materials are exposed, all construction work must immediately cease, and the awardee will contact the cognizant NSF Program Officer and the cognizant NSF Grants and Agreements Officer, within 48 hours of becoming aware of the exposure of cultural or historic materials.

68. **Software Development**

Software designs, prototypes, and all documentation for the final designs developed under this agreement must be made fully transferable upon direction of NSF. NSF may make the software design, prototype, and documentation for the final design available to competitors for review during any anticipated re-competition of the project.
69. Rights in Data Necessary for the Operation and Management of the Research Infrastructure

a. Notwithstanding the CA-FATC Article entitled, "Copyrighted Material," the awardee grants to the National Science Foundation in perpetuity the right to use and reproduce data produced under this award without charge or additional expense (except for whatever reasonable costs are incurred by the awardee to reproduce the data) as necessary should NSF have a future interest in the data.

b. The types and kinds of data deemed necessary for the operation and management of the research infrastructure, includes, but is not limited to:

1. Preventive maintenance guides
2. Preventive maintenance histories
3. Operating manuals and similar plans
4. Facility and instrument drawings (including design, shop and as-built drawings), designs and specifications
5. Schematics
6. Warranty data
7. Schedules
8. Software and manuals developed under these award funds
9. Inventories
10. Document indices
11. Subawards, contracts and vendor agreements
12. Operations reports
13. Memoranda with third parties pertaining to the award
14. Safety manuals

c. Rights acquired by NSF under this article do not include rights in any data produced solely for scientific research purposes or studies.

d. The awardee must notify NSF prior to introducing data that was not originated under the award, if such data will be critical to operate and/or manage the research infrastructure. NSF will consider any limitations on transferability of the data to a future awardee, as well as potential complications of any proprietary claims to the data prior to approving its use.

e. The awardee must ensure that the requirements of this article flow down to all subrecipients and contractors at all tiers.
70. Knowledge Management

The awardee should participate in NSF’s Knowledge Management Program to foster a learning culture across NSF’s research infrastructure portfolio. Participation may include, but is not limited to: sending appropriate staff to the annual Research Infrastructure Workshop; presenting lessons learned or good practices at the annual Workshop; participation in the Workshop Planning Committee; or providing lessons learned or good practices to NSF through either the Workshop Planning Committee, the cognizant NSF Program Officer or the cognizant NSF Grants and Agreements Officer.

71. Project Personnel and Competencies

NSF’s research infrastructure portfolio requires skilled people that collectively possess a broad range of professional competencies. The minimum set of competencies NSF considers essential for managing its major facilities are detailed in NSF’s Research Infrastructure Guide, section 4.6.6.