



Award Specific Financial and Administrative Terms and Conditions (FATCs) for the Management and Operation of the National Optical Astronomy Observatory – NSF Cooperative Agreement AST-1546092

Part 1. Award Specific Financial and Administrative Terms and Conditions (FATC)

1.1. Award Interpretation:

- A. The General FATC link in the CA is outdated. Disregard this link and refer to 1.1.B.
- B. Terms and Conditions Incorporated by Reference. At the time of award, all activities under this Cooperative Agreement (CA) are subject to NSF's Cooperative Agreement Financial and Administrative Terms and Conditions (CA-FATC) and the Cooperative Agreement Supplemental Financial and Administrative Terms and Conditions for Managers of Federally Funded Research and Development Centers (CA-SFATC-FFRDC). The CA-FATC and CA-SFATC-FFRDC were updated December 26, 2014 and are hereby incorporated by reference.

The CA-FATC and CA-SFATC-FFRDC are available at:
http://www.nsf.gov/awards/managing/co-op_conditions.jsp

- C. Order of Precedence. This Cooperative Agreement consists of the following terms and conditions in descending order of precedence:
 - 1. The terms and conditions of the Cooperative Support Agreements (CSAs), as amended.
 - 2. This Cooperative Agreement, as amended.
 - 3. The Cooperative Agreement Supplemental Financial and Administrative Terms and Conditions for Managers of Federally Funded Research and Development Centers (CA-SFATC-FFRDC), as amended.
 - 4. The Cooperative Agreement Financial and Administrative Terms and Conditions (CA-FATC), as amended.

D. Changes to Terms and Conditions:

1. NSF will notify the Awardee of any changes to the Terms and Conditions that result from changes in federal statute or changes in NSF-wide policy and procedures.
2. Changes to the Terms and Conditions of this Cooperative Agreement or a Cooperative Support Agreement that are not the result of NSF-wide policy and procedures shall be mutually agreed.
3. Deviations from the CA-FATC and CA-SFATC-FFRDC. To meet the specific needs and requirements of this CA, deviations are provided in full text herein. Any modifications to these deviations shall be incorporated by amendment after consultation with the Awardee.

1.2. Funding:

- A. NSF support under this cooperative agreement is contingent on the availability of funds and on the Awardee's continued satisfactory performance. NSF will provide funding for the management and operation of NOAO through CSA-1, and for other NOAO related activities through additional CSAs.
- B. In accordance with the National Science Board (NSB) Resolution NSB-2015-21 dated May 6, 2015 authorizing this CA, the NSB stipulated a cap on the amount of funding that could be awarded through the CA and a limit on the duration of the award as follows:

“RESOLVED, that the National Science Board authorized the Director, at her discretion, to issue an award to the Association of Universities for Research in Astronomy, Inc. for the management and operation of the National Optical Astronomy Observatory in an amount not to exceed \$121,659,877 (of which up to \$5.0M is from other than NSF appropriated funds) for a period of 5 years. The Director agrees to conduct a comprehensive performance review in year four of this award, and to recommend to the National Science Board no later than 60 months from the date of the award whether the award should be extended for an additional 5-year period in an amount not to exceed \$135,340,123 (of which up to \$5.1M is from other than NSF appropriated funds).”
- C. Any NSF funding provided under this award is subject to cost review. At time of this award, the total funding and the initial funding increment have yet to be determined. Upon completion of the NSF cost review and resolution of any cost issues identified in the review process, actual funding will be provided through CSA-1 under this CA.
- D. Funding for Other Cooperative Support Agreements. Additional support may be awarded under separate CSAs upon appropriate review and approval in accordance with established NSF merit review policy and procedures.

1.3. Management Fee:

Management fee may be requested in accordance with the NSF policy, subject to further negotiation.

1.4. Requirements for Contractual Arrangements:

A. The Article entitled "Subaward Requirements" of the CA-SFATC-FFRDC is modified to include the following requirements:

1. Definition: As used in this article, the term "contractual arrangement" includes subawards made to sub-recipients regardless of form, all contracts, purchase orders, orders issued under blanket purchase agreements or similar devices and modifications to all the aforementioned to be issued by the Awardee under this agreement with a value that exceeds \$250,000. The Awardee shall not artificially segregate its contractual agreements to lesser dollar amounts for the purpose of circumventing this requirement.
2. Prior Approval and Notification: The Awardee shall obtain the written approval of the NSF Program Officer and Grants and Agreements Officer prior to placing any new contractual arrangement (including subawards) exceeding \$250,000 that was not included in the approved budget. In addition, if any action causes the total amount of an existing contractual agreement to exceed \$250,000 or if any single action results in a change of more than \$250,000 to an existing contractual agreement, the Awardee must notify the NSF Program Officer and Grants and Agreements Officer by email with a brief explanation of the change.
3. Request for Authorization:
 - i. The Awardee shall submit electronically, via the FastLane "Notifications/Requests module, a request for authorization at least 30 calendar days in advance of the anticipated start date for any prior approval required by 1.4.A.2., unless otherwise determined by the NSF Program Officer and Grants and Agreements Officer. Incomplete or insufficient requests will be returned without approval, for proper completion by the Awardee. The documentation will include the proposed contractual document and a memorandum of negotiation which sets forth the principal elements of the purpose, selection procedures and price negotiation, including items, as appropriate, below:
 - a. A description of the supplies or services required.
 - b. Identification of the proposed vendor or subawardee, an explanation of why and how the proposed vendor or subawardee was selected, and the details of the competition process for the selection.
 - c. The proposed price of the contractual arrangement, together with the Awardee's cost or price analysis thereof (e.g., adequate price competition,

established catalog or market prices or commercial items sold in substantial quantities to the general public, prices set by law or regulation, and/or some other method).

- d. Identification of the type of contractual arrangement to be issued.
 - e. A table showing all applicable flow-down terms and conditions.
 - f. Where the agreement will be made without competition, the memorandum shall include a detailed justification.
- ii. Assignment. The Awardee shall insert a clause in all contractual arrangement reserving its right to assign the contractual arrangement to any third party should a successor Awardee be selected by the NSF.
 - iii. Prompt Notification of Claims: The Awardee shall give the NSF Grants and Agreements Official immediate notice in writing of any legal action or suit filed, and prompt notice of any claim made against the Awardee by any subawardee which in the opinion of the Awardee may result in litigation, related in any way to this CA, with respect to which the Awardee may be entitled to reimbursement from the Government.

1.5. Property:

A. Real Property and Personal Property:

1. NSF shall maintain transferability rights over all real and personal property purchased with funds provided by this cooperative agreement or transferred pursuant to 1.5.A.2. of this clause, to either transfer title to the Federal Government or to an eligible third party upon NSF's determination. The Awardee shall maintain property standards in accordance with the CA-SFATC-FFRDC Article entitled, "Equipment" and as set forth in the 2 CFR Part 200 "OMB Uniform Guidance".
2. Transfer of Government-owned Real and Personal Property from Previous Awards. All Government-owned Real and Personal Property (including equipment and supplies) specifically for NOAO for which the Awardee had accountability under NSF CA No. AST-0809409 or any other previous NSF award is hereby transferred to this CA. The Government retains its interest in this property. The inventory schedules provided by the Awardee upon the expiration of NSF CA No. AST-0809409 shall be attached and made part of this CA.
3. Title to Vehicles: Title to motorized vehicles, the cost of which has been funded entirely from funds provided to the Awardee through this CA or transferred pursuant to 1.5.A.2. of this clause r, vests with the Government. The Awardee acknowledges that NSF must satisfy its compliance obligations under federal motor vehicle policies. In cases where Government-owned vehicles are purchased, the Awardee must adhere to Federal Management Regulation 41 CFR 102-34, Motor Vehicle Management.

4. Financial Statement Disclosure: If the grantee anticipates having Government-owned Real and Personal Property in aggregate value of over \$100 Million, the grantee must disclose the total book value of individual NSF-Government-owned Real and Personal Property assigned to its custody under this award as a separate line item in the balance sheet or as a footnote in the audited financial statements. The listing should include all NSF-Government-owned Real and Personal Property purchased or constructed, including land and buildings under the award or acquired by screening excess through the General Services Administration (GSA). 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. A copy of the organization's most recent audited financial statements should be submitted electronically to fsrpts@nsf.gov and must be received no later than August 15 each year, effective August 2014. If financial statements are not available electronically, a paper copy should be submitted to:

National Science Foundation
Division of Financial Management
Attention: Accounting Operations Branch
4201 Wilson Boulevard, II-605
Arlington, VA 22230

B. Awardee-owned Real and Personal Property in Chile:

The following clause is applicable only to Cerro Tololo Inter-American Observatory (CTIO), Cerro Pachón, La Serena and any other NOAO activities conducted in Chile:

1. Title: Title to all Real and Personal Property acquired by the Awardee with its management fee or with funds from other sources shall remain with the Awardee. Both parties to this agreement desire that such property be used on a long-term basis for astronomical research.
 - i. AURA agrees that it shall use the Real and Personal Property acquired under 1.5.B above, in support of the NOAO or for such other astronomical uses as approved by the NSF for as long as AURA is the managing organization of NOAO. In the event that AURA ceases to be the managing organization of NOAO, AURA agrees that it shall enter into a lease agreement with a successor managing organization(s) designated by NSF. The successor managing organization shall have access to and use of all Real and Personal Property necessary for continuing operations located in Chile that was acquired hereunder, and titled with AURA, and which NSF determines are reasonably necessary for carrying out NOAO Chilean operations. Such lease arrangement be made available to the successor organization(s) at a rate of \$1 per year for as long as such property is used and maintained to support astronomical research. This lease shall be for the duration of the successor managing organization's term as manager and in view of the intent to maintain such property for the use

of astronomy. The lease shall be renewable if the successor organization's term is renewed, or it may transfer to a subsequent managing organization if the successor organization is not renewed, by mutual consent. Such consent shall not be unreasonably withheld by either AURA or NSF.

- ii. In the event that AURA becomes aware that it may cease to exist or becomes aware that it may cease to qualify to hold title to Real and Personal Property, AURA agrees that it shall notify NSF of such situation and enter into good faith negotiations with NSF in order to transfer to a successor organization title to all Real and Personal Property that would otherwise be subject to the lease requirements in 1.5.B.1.i. above.
 - iii. Both parties agree that language substantially identical to that found in subparagraphs i. and ii. of this clause shall, at the request of either party, be included in all future grants, contracts, or other agreements between the parties that include the operation of the NOAO by AURA.
2. Liens and Encumbrances: The Awardee shall undertake to insure that no lien or encumbrances will attach to the Real and Personal Property covered under Paragraph 1.5.B.1.i. above. This obligation shall also apply to property leased under 1.5.B.1.i.
 3. Sale or Transfer of Awardee-owned Property: Title to all property mentioned in this clause, are owned by the Awardee. In the event that this CA is not renewed, these properties may be leased, sold or transferred to a successor awardee at the request of NSF, subject to clause 1.5.B.1.i and the mutual agreement of the Awardee and the successor awardee on the terms of the lease, sale, or transfer agreement between the parties.
 4. Responsibility of the Awardee: The Awardee shall treat Awardee-owned property under this clause with an acquisition cost greater than \$25,000 as if it were Government-owned Real and Personal Property. All terms and conditions applicable to Government-owned Real and Personal Property in accordance with the CA-SFATC-FFRDC, are hereby applied to property with an acquisition cost greater than this threshold to the Awardee-owned property mentioned in this clause. Equipment with an acquisition cost equal to or less than \$25,000 is considered awardee property and shall be acquired and used in accordance the "Property Standards" under 2 CFR Part 200.

C. Dark Energy Camera (DECam) Property:

The Awardee shall apply all terms and conditions mentioned in this Cooperative Agreement for the Cerro Tololo Inter-American Observatory (CTIO) to the Dark Energy Camera (DECam) property integrated on the CTIO Telescope, as was specified in NSF CA No. AST-0809409 and is hereby transferred to this CA.

In addition, the following provisions are applicable only to the DECam property integrated on the Blanco 4-meter telescope at the CTIO located in Chile, in accordance

with the Memorandum of Understanding (MOU) executed on July 30, 2010 between the National Science Foundation (NSF) and the Department of Energy (DOE).

1. Title:
 - i. Title to the DECam property transferred to CTIO from the Department of Energy (DOE) shall vest with the Awardee in accordance with the following agreed upon conditions:
 - a. The Awardee shall hold title to the DECam property until the expiration of the term of this Cooperative Agreement and any renewals, or the DOE exercises its rights under the MOU to full title, rights, and interest, in the DECam and its transfer to DOE or any third party designated by the DOE, whichever occurs first.
 - b. The Awardee shall operate the DECam, in support of CTIO or other astronomical uses as identified by NSF, in coordination with DOE.
2. Responsibility of the Awardee: The Awardee shall be responsible and accountable for the management, control, use, maintenance and repair of the DECam property and shall follow the applicable process and procedures as described in the MOU.
3. Disposition:
 - i. The Awardee shall obtain a written approval of the cognizant DOE Contracting Officer, for the DOE Management and Operating (M&O) contractor managing the DOE portion of the DECam program, prior to seeking disposition procedures from the NSF.
 - ii. No disposition shall be made of the DECam property without the prior written approval of the NSF Grants and Agreements Officer, in coordination with DOE.
4. Awardee's Liability.
 - i. Except as otherwise specifically provided, the Awardee shall not be liable for loss or destruction of or damage to the DECam, unless such loss, destruction, or damage results from the negligence, willful misconduct, or lack of good faith on the part of any of the Awardee's directors or officers, or on the part of any of her/his managers, superintendents, or other equivalent representatives, who has supervision or direction of (1) all or substantially all of the Awardee's business, or (2) all or substantially all of the Awardee's operations at any one facility or separate location in which this agreement is being performed.
 - ii. Unless specifically authorized by the NSF Grants and Agreements Officer, the Awardee shall not be reimbursed for the cost of insurance covering loss or destruction of or damage to the DECam.
 - iii. In the event of loss or destruction of or damage to the DECam, arising from any cause, the Awardee shall, to the extent reasonable and practical, promptly notify the NSF Grants and Agreements Officer and the cognizant DOE Contracting Officer, for the DOE M&O contractor managing the DOE portion of the DECam program.

- iv. The Awardee, to the extent reasonable and practical, may make emergency repairs to the DECam to prevent further harm or damage to the DECam or supporting structure, but shall promptly notify the NSF Grants and Agreements Officer and the cognizant DOE Contracting Officer, for the DOE.

1.6. Relationships with the Tohono O'odham Nation:

- A. The Awardee in its employment practices on Kitt Peak and at its Tucson operations center shall abide by and act in accordance with the provisions of Article 9 of the NSF/Tohono O'odham Nation lease dated October 24, 1958, which provided for the use by the NSF of certain Tohono O'odham reservation lands. This article is repeated below in its entirety:

Preferential Employment: Lessee shall extend a preference in employment (other than in construction, alteration or repair of public buildings and public works) to members of the Tohono O'odham Nation where their skills and abilities are commensurate with job openings. Members of the Tohono O'odham Nation employed by Lessee shall be compensated on the same scale or basis that is established for similar services performed for the Tohono O'odham Agency. Should any members of the Tohono O'odham Nation be employed by Lessee in the construction, alteration or repair of public buildings or public works, such employment shall be in accordance with the Davis-Bacon Act, U.S.C. Title 40, Sec. 276a et. seq.

- B. The NSF further recognizes that certain Nation Ordinances regarding Tohono O'odham employment rights may be held to be binding upon the Awardee in its operations conducted with the Tohono O'odham Nation and agrees that no provisions of this Agreement are intended to negate the Awardee's obligations to comply with such ordinances.

1.7. Public Availability of Data Produced Solely for Scientific Activities:

Data produced solely for scientific purposes, whether by project staff or visiting scientists, will become publicly available within a reasonable time limit. Awardee will determine and impose appropriate conditions on users of the facility to assure public availability of all such data.

1.8. Rights in Data Necessary for the Operation and Management of the NOAO facilities:

- A. Rights in Data Necessary for Operation and Management. Notwithstanding the CA-FATC Article entitled, "Copyrightable Material," or any other clause of this agreement, the Awardee grants to the NSF in perpetuity the right to use and reproduce data that originated under this award or prior awards subsumed into or superseded by this CA without charge or additional expense (except for whatever reasonable costs are incurred

by the awardee to reproduce the data) as necessary for the operation and management of the NOAO facilities. This includes the right to make such data available to any party interested in competing for any subsequent award to operate and manage the NOAO facilities, and any Awardees the National Science Foundation selects as a result of these competitions.

- B. Data Types. The types and kinds of data deemed necessary for the operation and management of the NOAO facilities, includes, but is not limited to:
1. Preventive maintenance and calibration guides, histories, and agreements
 2. Operating manuals, policies, and similar plans
 3. NSF reports and annual work plans
 4. Schedules
 5. Data repository, and all supporting documentation and software
 6. Software and manuals
 7. Inventories
 8. Document indexes
 9. Subawards, subcontracts, and vendor agreements
 10. Operations reports, including data on performance metrics
 11. Safety Manuals
 12. Memoranda with third parties
 13. Facility and instrument drawings (including design, shop and as-built drawings), designs and specifications
 14. Schematics
 15. Warranty data
- C. Data Produced Solely for Scientific Purposes. Rights acquired by the NSF under this clause do not include rights to any data produced solely for scientific purposes.
- D. Prior Approval for Data Not Originating Under the Award. The Awardee must seek NSF approval to introduce data that was not originated under this award if such data will be critical to operating and/or managing NOAO. In part, 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. Flow-down Requirements. The Awardee shall ensure that the requirements of this clause flow down to all subawardees, subcontractors and vendors at all tiers.
- 1.9. Collaboration and Outside Funding Sources:
- A. It is sometimes appropriate for funding to be provided to the Awardee by other NSF Programs or other organizations, including Federal and State agencies in support of their missions or in support of mission-related staff research. It is also recognized that it may be appropriate for the Awardee personnel or Awardee-managed facilities to be used for NSF and non-NSF projects that are deemed to be in the national interest. Such activities,

however, shall be developed in coordination with NSF and not impact negatively on NSF-sponsored activities to be performed under this Agreement, as described in the annual Program Operating Plan. Accordingly:

1. **New Collaborative and Partnership Effort Notification.** The Awardee shall contact the NSF Program Officer prior to negotiations of any new collaborative or partnership efforts that could affect activities performed under this agreement, or impact or involve NOAO facility components.
 2. **Other Funding Source Notification.** The Awardee shall request written approval from the NSF Program Officer prior to submitting to any other NSF program or any other organization (including Federal, State, or local agencies) any proposal exceeding \$100,000 or more that involves or impacts NOAO Facility components, and prior to initiating any new collaborative and partnership efforts that could significantly affect activities performed under this CA, or impact or involved NOAO Facility components. The request shall include:
 - i. the proposal or collaborative title
 - ii. name of the agency, program, or organization
 - iii. name of the cognizant official at the agency, program, or organization
 - iv. reasons for seeking outside funds or collaborations
 - v. impact of the project on the NOAO Facility and/or activities under this agreement
 - vi. number of person months devoted to the project by the Awardee key personnel
 - vii. total level of outside support being sought
 - viii. level of NSF/Awardee co-sponsorship, if any
 - ix. copies of the transmittal letter to the potential sponsor, the associated budget, and an abstract of the proposed work
 3. Upon notification from the sponsor that the proposed work is to be funded, the Awardee shall forward to NSF a final statement of work, a final budget and any modifications to the documentation of the original nine criteria in response to the review. NSF may conduct retrospective reviews of such proposals; the Awardee shall maintain files of all such proposals to be available to NSF on request.
- B. **Special Projects.** It is recognized that it may be appropriate for NOAO to take on additional projects and work tasks outside the baseline scope, which are funded by AST or other sources. These special projects and work tasks will be proposed to NSF, will be reviewed under established NSF merit review policy and procedures, and if funded, the mechanism will be additional CSAs.
- C. **Foreign Commitments:** CA-FATC article entitled, “Partnerships with Foreign Collaborators,” is hereby deleted in its entirety and replaced with the following (formatted consistent with FATC):
1. The Awardee shall provide written notification to the NSF Program Officer prior to entering into any mutually agreed arrangements with foreign collaborators,

including foreign governments, corporations, non-profit organizations, universities or other organizations.

2. The Awardee shall maintain a list identifying all written commitments to foreign governments, corporations, non-profit organizations, universities and other foreign organizations that involve the use of NOAO personnel, facilities and /or services. The form and functionality of this list will be determined by the parties to this CA. The NSF Program Officer and Grants and Agreements Officer shall have access to this list and may require reporting as necessary.
3. This provision is not intended to require notifications to NSF of the routine use of Awardee services and facilities by foreign investigators or foreign students, or the routine use of foreign facilities by NOAO personnel in accordance with the Awardee's standard policies and procedures.

D. Acceptance and Monitoring. As part of NSF's oversight obligations, NSF will monitor the extent of the Awardee's obligations involving use of NOAO personnel and/or facilities for non-AST funded projects.

1.10. News Releases:

The CA-FATC Article entitled, "Publications", Paragraph b. "News Releases", is deleted and replaced with the following:

The Awardee shall notify the NSF Program Officer or designee prior to issuing news releases concerning NSF-supported activities.

1.11. Awardee Policies and Procedures, Records and Document Management:

- A. Consistency. The Awardee's policies and procedures shall comply with the terms of this agreement.
- B. Electronic Access. The Awardee shall develop and maintain a records and document management system that is web based with secure access. This system shall contain all important records and documents, including but not limited to management and operations policies and procedures manuals that are accessible to the NSF Program Officer and the Grants and Agreements Official. The content of the system shall be mutually agreed among the Awardee and the NSF Program Officer, and the NSF Grants and Agreements Officer.
- C. Changes. Any substantive changes to the Awardee's policies in the areas of: (a) personnel matters, such as employment and recruitment, salaries and benefits, and outside employment; (b) visitors; (c) use of NOAO facilities and services; (d) intellectual property; and (e) other policies related to scientific programs and staff shall be forwarded, with a statement of the reasons for the proposed changes, to the NSF Program Officer for review and comment. The NSF Program Officer shall provide comment to the Awardee

within forty five (45) days of receipt of the proposed changes to the policies and procedures. Should NSF fail to respond within that period, Awardee may assume that the changes are acceptable to NSF without further review. The NSF Program Officer shall be notified electronically when the policy is issued in its final form and is accessible on the Internet.

1.12. Notice to the Government of Labor Disputes:

- A. If the Awardee has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this agreement, the Awardee shall immediately give notice, including all relevant information, to the Grants and Agreements Officer.
- B. The Awardee agrees to insert the substance of this clause, including this, in any subcontract to which a labor dispute may delay the timely performance of this agreement; except that each subcontract shall provide that in the event its timely performance is delayed or threatened by delay by any actual or potential labor dispute, the subcontractor shall immediately notify the next higher tier subcontractor or the prime Awardee, as the case may be, of all relevant information concerning the dispute.

1.13. Health, Safety and Security:

- A. The Awardee shall take all reasonable precautions in the performance of the work under this CA to protect the health and safety of employees and of members of the public from all hazards and to minimize danger to life and property, and shall comply with all applicable health, safety, and fire protection laws, regulations, and requirements.
- B. The Awardee shall maintain an accurate record of all cases of death, occupational disease or injury arising out of, or in the course of, employment incident to performance of the work under this CA. In addition, the Awardee shall promptly furnish the NSF Program Officer and Grants and Agreements Officer with the details of any deaths, serious occupational diseases, injuries resulting in permanent handicaps, and major accidents occurring in connection with this CA.
- C. The Awardee shall maintain an accurate record of all security incidents. In addition, the Awardee shall promptly furnish the NSF Program Officer and Grants and Agreements Officer with the details of any major security incidents that involve facilities or personnel.

1.14. Information Security:

In accordance with the CA-SFATC-FFRDC article entitled, "Information Security," the Awardee shall submit a written summary of its IT security program to the NSF Program

Officer within six months of the effective date of this agreement. Any significant changes to this IT security program shall be summarized in the annual management report submitted per the requirements of the CSA.

1.15. Energy Conservation:

- A. In accordance with Executive Order (EO) 13514 and EO 13423, the Awardee shall provide complete, legible electronic copies of invoices for utilities and waste disposal and recycling services on an annual basis to the NSF Sustainability Officer, at nsfsustainability@nsf.gov. Invoice copies are due by March 31 each year and should cover twelve months, from October 1 through September 30 of the prior year, or sufficient to account the twelve consecutive month period most closely approximating the U.S. Government Fiscal Year. This requirement applies to all federally-owned buildings that are: 1) located in the United States or its territories; 2) more than 10,000 square feet in size; and 3) currently used as office, laboratory, information technology room or center, or dormitory space.
- B. Utility invoices include consumption and costs for gas, electricity, steam, hot water, and chilled water. The awardee should not provide utility invoices for warehouse space, or any other building that does not meet the criteria above, unless the charges are not separate, or unless the building is also used as occupied office space. The awardee shall indicate whether each building has one or more separate utility meters specific to that building only.
- C. Waste disposal invoices shall include the amount and cost of waste removed by waste disposal services for disposal in landfills or by incineration. For reporting purposes, material collected for recycling is not counted as disposed waste; invoices for recycling may be provided, or the costs may be itemized, separately. Waste disposal and recycling invoices may cover services for the facility as a whole, rather than for individual buildings.
- D. NSF will use the data for internal monitoring of sustainability activities and shall retain the data as part of the mandated reporting and property management operational cost records. The data may also be provided to the Office of Management and Budget (OMB) and the Council on Environmental Quality (CEO/OFEE) to document cost savings from facility improvements.

1.16. Environmental Compliance:

The Awardee acknowledges that NSF must satisfy its compliance obligations under federal environmental laws, including but not limited to, the National Environmental Policy Act, 42 U.S.C. §§ 4321, et seq., the National Historic Preservation Act, 16 U.S.C. §§ 470, et seq., and the Endangered Species Act, 16 U.S.C. §§ 1531, et seq. The Awardee shall cooperate to the fullest extent possible with NSF's efforts to meet those

obligations. The Awardee shall 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 Grants and Agreements Officer.

1.17. Master Site Plan:

- A. The Awardee shall develop and furnish the NSF Program Officer with a Master Site Plan pertaining to each geographic location of NOAO facilities. The Plan should include the information listed under the Article entitled, "Master Site Plan" of the CA-SFATC-FFRDC. This Plan shall be updated on an annual basis and revised copies forwarded to the NSF Program Officer on October 1 of each year as an Interim Report in Research.gov. If there are no changes, the Awardee shall provide the NSF with a statement that no Master Site Plan changes have occurred during the past year.
- B. Proposed construction of buildings and facilities or major modifications thereto and plans for acquisition of additional lands must be referenced in the Master Site Plan prior to the Awardee's submission of a request for funding such actions.

1.18. Applicability of Chilean Labor Laws:

No provision of this CA is intended to negate the duty of the Awardee to comply with Chilean laws applicable to personnel working on NOAO programs in Chile.