U.S. NATIONAL SCIENCE FOUNDATION

TITLE:

FINAL WAIVER FOR MINI-SPLITS

1. Summary of Waiver

Agency: U.S. National Science Foundation (NSF)

Office: Division of Acquisition and Cooperative Support

Final Waiver: The U.S. National Science Foundation, Division of Acquisition and Cooperative Support, is proposing a product waiver of the requirements of section 70914 of the Build America, Buy America Act included in the Infrastructure Investment and Jobs Act (Pub. L. No. 117-58) for two (2) **Air Conditioner Mini Splits** used in an infrastructure project funded through Cooperative Support Agreement # AST-2211467.

Waiver type: Non-availability

Waiver level: Project Level Waiver

Length of the waiver: This waiver shall be in effect from the date of final waiver approval until September 30, 2027, the estimated date of project completion.

2. Award, Program, and Project Information

Federal Award Identification Number (FAIN): AST-2211467

Title of Award: NSF's NOIRLab: Management and Operations of the Directorate, Mid-Scale Observatories, and the Community Science and Data Center (NOIRLab Base)

Recipient Name: Association of Universities for Research in Astronomy, Inc. (AURA)

Recipient Unique Entity Identifier (UEI): LFDKLGTB62C4

Federal Financial Assistance Listing: 47.049 Mathematical and Physical Sciences

Federal Financial Assistance Funding Amount: $58,132,842.

Summary of Award and Program:
NSF’s National Optical-Infrared Astronomy Research Laboratory (NSF’s NOIRLab) is the U.S. national center for ground-based nighttime optical astronomy. NOIRLab includes the International Gemini Observatory (Hawaii), the Kitt Peak National Observatory (Arizona), the Cerro Tololo Inter-American Observatory (Chile), operations of Vera C. Rubin Observatory

(Chile), and the Community Science and Data Center (CSDC) (Arizona). NOIRLab provides access to state-of-the-art instrumentation on large (8-meter mirror diameter) and medium-sized or mid-scale (approximately 4-meter diameter) telescopes to enable research in all areas of astronomy. NOIRLab also provides a national focus for the development of research and educational partnerships with universities, other NSF-funded research disciplines, other funding agencies, and international communities. NOIRLab is a preeminent laboratory for research in modern ground-based optical-infrared (OIR) astronomy, supporting a diverse community of scientists spread across all 50 states through the entire research life cycle

The management, operations and maintenance of these facilities is carried out through financial assistance agreements issued to the Association of Universities for Research in Astronomy, Inc (AURA) supports management, operations, and maintenance of these facilities. Operations and management consist of a number of activities ranging from research activities, education, public outreach programs, facility planning, equipment repairs and maintenance, and facility maintenance. Individual infrastructure projects pertaining to the NOIRLab may also be funded through this agreement.

Title of Infrastructure Project: The Logistics Warehouse Climate Improvement Project

Total Cost of Infrastructure Project Expenditures (including all Federal and non-Federal funds): $45,000 (including parts and installation)

Infrastructure Project Location: Tucson, AZ

Project Summary:
Because this financial assistance award supports the operation and maintenance of NOIRLab facilities, individual smaller infrastructure projects may be pursued throughout the life of the agreement, to include the maintenance projects of existing facilities. One such project under this agreement is a climate improvement project of the Logistical Warehouse located in Tucson, AZ which houses office space and equipment for NOIRLab facilities which are operationally supported through this warehouse. Due to rising temperatures within the Arizona climate, improvements to the air conditioning system are necessary for the health and safety of staff and equipment.

AURA has selected ductless mini split air conditioning units due to higher efficiency ratings and their capability of controlling multiple zones of varying size. Because of the small size of this facility, the installation of a full HVAC system is cost prohibitive and inefficient. The air conditioning units will support the existing evaporative system to cool the central areas of the warehouse. The multi-zone systems will be also used to heat and cool the three modular offices inside of the warehouse where window style AC units are not appropriate due to the production of additional heat emissions and condensation and the lack of windows in the facility.

3. Waiver Information

The Buy America Preference set forth in section 70914 of the Build America, Buy America Act included in the Infrastructure Investment and Jobs Act (Pub. L. No. 117-58), requires all iron, steel, manufactured products, and construction materials used for infrastructure projects under Federal financial assistance awards be produced in the United States.

Under section 70914(b), NSF may waive the application of the Buy America Preference in any case in which it finds that: applying the domestic content procurement preference would be inconsistent with the public interest; types of iron, steel, manufactured products, or construction materials are not produced in the United States in sufficient and reasonably available quantities or of a satisfactory quality; or the inclusion of iron, steel, manufactured products, or construction materials produced in the United States will increase the cost of the overall project by more than 25 percent. All waivers must have a written explanation for the proposed determination; provide a period of not less than 15 calendar days for public comment on the proposed waiver; and submit the final waiver to the Office of Management and Budget Made in America Office for review to determine if the waiver is consistent with policy.

AURA is prioritizing the use of domestic construction materials for all infrastructure projects pursued under this overall financial assistance agreement. The recipient, however, has been unable to locate any domestic mini-split systems that are both manufactured in the United States, and in which the cost of the components mined, produced, or manufactured in the United Sates is greater than 55%. For this reason, a non-availability waiver is being sought to allow the procurement of non-domestic mini-splits.

4. Description of Covered Items

Description of Items Being Waived: Two (2) Air Conditioner Mini-splits, similar or equivalent to the following models:

Daikin Models:

- 1 EA –36,000 BTU 3-zone, 23.9 SEER, Mini-Split system, Model 4MXL36TVJU / 2-CTXS07WVJU9 / FTXS24LVJU; est. retail price: $5,339.00, and;
- 1 EA –48,000 BTU 3-zone, 21.3 SEER, Mini-Split system, Model RMXS48LVJU / CTXS07WVJU9 / 2-FTXS24LVJU; est. retail price: $5,595.00

Fujitsu Models:

- 1 EA – 45,000 BTU 3-zone, 20.0 SEER2, Mini-Split system, Model AOU45RLXFZ / 2-ASUH07LPAS-1 / ASUH24LPAS-1; est. retail price: $5,841.66, and;
- 1 EA –45,000 BTU 2-zone, 20.0 SEER2, Mini-Split system, Model AOU36RLXFZH / ASUH07LPAS1 / ASUH24LPAS-1; est. retail price: $5,660.40

Cost of items: estimated cost: $5,000 - $6,000 each; approximately $12,000 total

Relevant PSC: 4120 - Air Conditioning Equipment

Relevant NAICS: 333415 - Air-conditioning equipment (except motor vehicle) manufacturing

5. Waiver Justification

Justification for Waiver:

Mini-splits are classified as a "manufactured product" in accordance with the Buy America Preference definitions found in 2 CFR §184.3. In accordance with the definition of "Produced in the United States", a domestic manufactured product must meet the criteria of being (1) manufactured in the United States; and (2) the cost of the components of the manufactured product that are mined, produced, or manufactured in the Unites States must be greater than 55% of the total cost of the components. While the recipient has been able to locate mini-splits that are manufactured in the United States, they have not been able to locate any mini-splits that also meet the criteria of containing predominately domestic materials. For this reason, a non-availability waiver is being sought to allow the procurement of non-domestic mini-splits.

Description of the efforts made to avoid the need for a waiver:

The recipient solicited from U.S. manufactures and resellers to seek out mini-splits that meet the Federal BABA requirements. In addition, specific targeted outreach was made to 18 manufacturers and resellers who appeared to provide domestic mini-splits. Through this market research, at least five vendors stated they can provide mini-splits that are assembled in the U.S., but none of these units met the criteria of containing predominately domestic materials to meet BABA compliance. As a result, no units were located that are fully BABA compliant.

Finally, a search was conducted of waivers posted to the Made in America Website to identify if other agencies were pursuing similar waivers for mini-split systems. Seven separate waivers, primarily procurement waivers, were located for mini-split systems on the Made in America Website, each submitted within the last year. This further confirms a lack of domestic manufacturers of this end item.

Additional market research conducted by the National Science Foundation in response to this waiver request has also resulted in no domestic sources being located.

Anticipated impact if no waiver is issued:

Without this waiver, the recipient will not be able to proceed with the Logistics Warehouse Climate Improvement project as planned, increasing the safety risks of employees who will have to work in higher temperatures, and increasing the risk of damaged equipment due to heat and moisture build up. An alternative option would be the installation of a full HVAC system into the warehouse which would result in a significantly higher cost for purchase and installation as well as ongoing increased costs for maintenance and operation. A full HVAC system is not aligned to the actual need of this facility.

Expectations for the agency, award recipients, and industry at the conclusion of the waiver:

While this waiver covers a one-time purchase specific to the project, the NSF and recipient will continue to evaluate possible domestic sources of supply for any upcoming or new projects to achieve compliance going forward. The National Science Foundation will continue to promote domestic sources of supply for future projects.

Statement of Good Faith Effort:
The recipient certified that the market research and bid soliciting efforts encompassed a broad, good-faith effort to identify and solicit domestic products.

6. Assessment of Cost Advantage of a Foreign-Sourced Product

Under OMB M–22–11, agencies are expected to assess ‘‘whether a significant portion of any cost advantage of a foreign-sourced product is the result of the use of dumped steel, iron, or manufactured products or the use of injuriously subsidized steel, iron, or manufactured products’’ as appropriate before granting a public interest waiver. NSF’s analysis has concluded that this assessment is not applicable to this waiver as this waiver is not based on the cost of foreign-sourced products.

7. Solicitation of Comments

Final Waiver: The U.S. National Science Foundation did not receive any public comments by November 29, 2024, regarding *the availability of domestically produced mini-splits*. The public comment period was from November 14, 2024 thru November 29, 2024. The 15 day comment period required by OMB Made in America Office.

For more information on the Build America, Buy America Preference, please reference new.nsf.gov/funding/build-america-buy-america or MadeinAmerica.gov.