WAIVER NUMBER: 2024-03
Issued: September 30, 2024
Expires: December 31, 2024

Build America, Buy America Act Nonavailability Waiver

Waiver Summary: The United States Department of Energy (DOE) Office of State and Community Energy Programs is issuing a project nonavailability waiver of the manufactured products and construction materials domestic preference requirements of section 70914 of the Build America, Buy America Act (BABA) included in the Infrastructure Investment and Jobs Act (Pub. L. No. 117-58) as applied to one federal financial assistance award for the Warner, Oklahoma school district. This limited nonavailability waiver will allow the Warner School District to purchase non-compliant variable refrigerant flow HVAC systems and associated building controls and electrical system upgrades, including electrical distribution equipment and spray insulation.

Duration of the waiver: The effective date of this waiver is from date of issue to December 31, 2024.

Applicability: The waiver will apply to eligible expenditures incurred by the recipient on or after the effective date of the final waiver for the period that the waiver is active.

Recipient: Warner School District I 74 (LUMZT3DJYK26)

Total estimated project cost related to infrastructure: $12,044,852

Estimated total cost of products being waived: $10,700,000

Waiver Type: Nonavailability waiver of the BABA manufactured product and construction material requirements for the products listed below.

Waiver Level: Project-specific waiver for one award.

Funding Mechanics: Funding for the infrastructure project is made available through the 2022 Funding Opportunity Announcement for Energy Improvements at Public K-12 School Facilities – Bipartisan Infrastructure Law (BIL) – Renew America's Schools. The location of the project is Warner, Oklahoma. The period of performance of this award is 48 months, from November 30, 2023 to November 30, 2027. Purchase of the items is expected by December 2024.

Description of Covered Items: This waiver proposes to waive

- HVAC system with integrated Building Automation Controls including Dedicated Outdoor Units, Split-System Heat Pumps, Variable Refrigerant Flow (VRF) Heat Recovery Condensing Units, associated ducted and cassette type Fan Coils, and standalone VRF manufacturer building automation system master controllers that enable scheduling, alarming, and monitoring of the VRF system to reduce energy and cost expenditures. NAICS Codes 333415, 333914, 334512
- Electrical Distribution Equipment: Switchboards, Distribution Boards, Panel Boards, and fused disconnect switches, and circuit breakers to power to ES and MS/HS campus renovations (NAICS Code 335313)

- Spray Foam Insulation: Polyurethane and Isocyanate foam sprayed into interstitial roof space. (NAICS Code 326150)

HVAC System with Integrated Building Automation

After reviewing several options for the HVAC system, it was determined that the VRF system is the only option that meets the recipient's needs in terms of energy efficiency, de-carbonization, physical space compliance, cost effectiveness, reliability, and regional operations and maintenance support. Factors contributing to this decision include: Residential air or ground source heat pumps (GSHP) require additional floor space in the classrooms; Boiler/Chiller, Air to Air Split Systems, and GSHPs all require more ceiling space than is available in many areas without significant additional modification of the structure; Hydronic based systems would require additional new construction to protect pumps and equipment; and standing seam metal roofing disallows roof mounted and ducted equipment.

Market research and industry outreach to identify a BABA-compliant HVAC VRF system was conducted by Lawrence Berkely National Laboratory in October 2023 – November 2023. Market research was conducted by the recipient from November 2023-May 2024. Market research was conducted by the DOE Technical Project Officer in October 2023-December 2023.

The recipient reached out to 4 industry-leading suppliers for the HVAC/VRF equipment. In their outreach, the recipient was unable to find a manufacturer that would certify that their equipment was BABA compliant. The manufacturers' representatives report having contacted their respective manufacturing facilities to provide the recipient information regarding BABA compliance but have not responded with any applicable documentation. The research found that the air-to air heat pump equipment specified is assembled in the United States, but many of the components are manufactured outside of the United States and the equipment does not meet the 55% requirements. Therefore, the recipient was unable to find a manufacturer that would certify their equipment was BABA compliant. Additionally, the Recipient reviewed the market research that was recently approved in Waiver 2024-01 and verified that the previous analysis still stands that there are no air-to-air heat pumps that meet BABA compliance. Ground source heat pumps were also considered but determined to be cost prohibitive for this project with a typical premium of 30%-50% above air source heat pumps. Additionally, the electrical services would also still need to be replaced to support the ground source system, further increasing the system cost impact.

The Renew America's Schools program engaged a national lab to conduct extensive research in this area. Through this research, the national lab and the Renew America's Schools Team was unable to identify a manufacturer that would certify they meet BABA compliance for the HVAC equipment.

The Recipient's representatives are active in the building automation construction industry and generally aware of all manufacturers in the industry and the specifications/capabilities that they manufacture. This project has specific requirements for the building automation system being 100% compatible with the manufacturers product line. This compatibility is important for the system's total lifetime cost and to meet the owner's energy savings targets. Because the VRF system equipment manufacturer cannot meet BABA, the matching manufacturer building automation system equipment is also non-compliant.

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Electrical Distribution System Equipment

The Recipient reached out by phone and email to 3 industry-leading manufacturers for the electrical distribution system equipment. One manufacturer provided an email saying they could meet BABA if this requirement was stated when ordering the products but was unwilling to provide a letter certifying this fact. Another manufacturer requested additional clarifications and appeared unfamiliar with BABA requirements under Federal financial assistance. The third has not responded within a reasonable amount of time. In the end, the recipient was unable to find a manufacturer that would certify their equipment was BABA compliant. Additionally, there is great complexity in the many configurations of individual components that combine to create the electrical distribution equipment systems above, and the origin of each component is extremely difficult to discern until the actual equipment order is placed. Similarly, due to the above reasons, Product Service Codes (PSC) for equipment are unavailable until the order is placed. The Recipient is unable to place an order with a specific manufacturer until they confirm the equipment meets BABA compliance or receives a nonavailability waiver.

Spray Foam Insulation:

The Recipient reached out by phone and email to 2 industry-leading manufacturers for the polyurethane and isocyanate foam spray foam insulation product. The recipient specifically provided the manufacturers DOE's published document, DOE's Implementation of the Buy American Preference, to ensure clear understanding of the BABA requirements. Neither manufacturer has responded.

Additionally, the Recipient executed extensive online research to identify any manufacturers with published BABA compliance documentation.

In the end, the recipient was unable to find a manufacturer that would certify their product is BABA compliant. Also, the country of origin and Product Service Codes (PSC) for equipment are unavailable until the order is placed. The Recipient is unable to place an order with a specific manufacturer until they confirm the equipment meets BABA compliance or receives a nonavailability waiver

Justification: The recipient's market research was not able to yield product manufacturers who were able to meet the 55% cost of components requirement for the manufactured products or the construction material manufacturing requirements that are required for the project's completion. These products were found to be manufactured in the United States, but did not meet the 55% cost of components test. Recipient's market research was also unable to yield certification for spray foam materials. After extensive outreach, no domestic manufacturer was able to provide the materials necessary to meet the BABA requirements for all products specified in this waiver. These requirements are important for the systems total lifetime cost and to meet the owner's energy savings targets.

Impact Absent the waiver: Absent this waiver, the project would not be able to be completed given that HVAC is the primary upgrade the recipient is seeking. In addition, the project period of performance for installation is between June 2024 and November 2027, concluding a portion before the start of the 2024-25 school year so the desired product is necessary in order to meet project deadlines.

Assessment of Cost Advantage of a Foreign-Sourced Product: Under OMB M–24–02, 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 nonavailability waiver. DOE'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.

Summary of Public Comment: The proposed waiver request was publicly posted by the Department of Energy for comments during the period of August 20 to September 3, 2024. No comments were received from the public, and therefore no substantive changes were made in response. Changes were made to the formatting of this waiver.