

Department of Energy
Build America, Buy America Act
Proposed Project Specific Non-Availability Waiver
Fiber Core Insulators
BABA WAV 2026-19

Proposed Waiver Summary: The United States Department of Energy (DOE) – Office of Electricity (OE) is proposing a project specific nonavailability waiver of the manufactured products domestic preference requirement 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 Electric Power Research Institute, Inc. (EPRI). This proposed limited nonavailability waiver allows the recipient to purchase non-BABA compliant fiber core insulators.

Duration of the Waiver: The effective date of this waiver is from date of issue through the project performance period (estimated October 2028).

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 of the project performance.

Recipient: Electric Power Research Institute, Inc. (EPRI) (JBV2SMLRBK29)

Total estimated project cost related to infrastructure: \$36,034,716

Waiver Type: Non-availability waiver of the BABA manufacturer product requirement 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 2023 Funding Opportunity Announcement for Grid Resilience and Innovation Partnerships (GRIP) – Bipartisan Infrastructure Law (BIL) – Smart Grid (DE-FOA-0002740). The location of the project is Milton, Vermont.

Description of Covered Items:

- Qty. 12 - Composite fiber core insulators for SmartValve 10-1800 v1.04 installation (NAICS: 335311, PSC: 5970)

Description of Market Research: The recipient performed exhaustive market research and issued an RFI in May of 2022. Smart Wires Inc. was the sole respondent to the RFI, and therefore no other vendors indicated that a BABA compliant option was available. DOE/NETL completed market research in September 2025 and found that Several US manufacturers produce composite fiber insulators that meet the technical requirements for the SmartValve 10-1800 v1.04 applications. These models and manufacturers produce composite fiber core insulators with

mechanical load and electric withstand capability that meet or exceed the known requirements for the SmartValve 10-1800 v1.04, such as voltage class, continuous and fault currents, mechanical strength, and outdoor environmental durability. Despite potentially BABA compliant options available in the market, manufacturers failed to provide quotes when requested by the recipient (following DOE's findings) over a 4+ week period in early 2026. Due to this, the products that the recipient is requesting to be waived from BABA are indeed not available on the domestic market. The recipient had three manufacturers offer no response and one indicated that while they could likely engineer a technically compliant product, they could not produce it domestically. To be clear, none of these companies offered a comparable product off-the-shelf.

Justification:

This project's purpose is to demonstrate "SmartValves," a unique, patented, and award-winning device that can push power off overloaded lines and pull power onto underutilized lines. Distinct from legacy technologies based on copper and steel, a SmartValve unit leverages a modular, transformer free design, sealed forced air cooling, integrated fast-acting bypass, and deployment flexibility to deliver greater solution value. The use of power electronics in the SmartValve allows for rapid, real-time dispatch that reduces fatiguing operational strain on the existing Subrecipient's PST. SmartValves are the proprietary technology of only one company, Smart Wires Inc., UEI # D9E2S7X8V917, which designed and manufactured these units in the United States. Therefore, Smart Wires Inc. is the sole potential supplier for this technology. The component parts for the SmartValves are both domestically and internationally sourced. While Smart Wires strives to maximize the use of domestic components, unique parts component availability, including composite fiber core insulators and supply chain dynamics limit this effort. DOE approved this project in Vermont specifically for the implementation of the SmartValve technology; therefore, this project cannot progress without a BABA waiver approval for this ancillary equipment. The Subrecipient went through a Request for Information (RFI) to identify solutions and there were no devices manufactured in the U.S. meeting the RFP.

Vermont benefits from a financial perspective with the selection of the least cost solution, the Advanced Power Flow Control device. The Subrecipient has a phase shifting transformer (PST) on the border with New York State that is experiencing high levels of tap changing and a subsequent increase in maintenance costs. This project leverages APFCs to optimize cross-border flows with Vermont while reducing PST maintenance costs.

Impact Absent the waiver: The ancillary installation materials for the SmartValves are both domestically and internationally sourced. While Smart Wires strives to maximize the use of domestic components, this effort is limited by component availability for unique parts including composite fiber core signal columns. As a result, if the BABA waiver is not passed, the utility would have to proceed with a different technological solution (if possible), which would likely negate their eligibility to access the DOE funds, severely impacting the economic viability of the investment and thus terminating the project for all parties.

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.

Solicitation for Comments: DOE is seeking public comments for all interested parties, including industry members and current manufacturers of the covered fiber core insulators listed above, regarding the potential availability of project-compliant products from domestic manufacturers. The proposed waiver is available for public comment for fifteen (15) calendar days. **Comments are due no later than Month Day, Year**, and must be submitted by email to the DOE Contracting Officer at **BABAWaiverComment@netl.doe.gov**. Please put “BABA WAV **YEAR-##** - EPRI Fiber Core Insulators” in the subject line of the email.