December 13, 2024

NOTICE AND REQUEST FOR PUBLIC COMMENT

SUBJECT: PROPOSED Nonavailability waiver of Section 70914(a) of P. L. 117-58, Build America, Buy America Act, 2021 for domestically assembled solar photovoltaic panels as applied to select recipients of Federal Financial Assistance from the U.S. Environmental Protection Agency's Office of the Greenhouse Gas Reduction Fund within the Solar for All program

Proposed Waiver

The U.S. Environmental Protection Agency (EPA) is proposing to issue a temporary, limited nonavailability partial waiver of the manufactured product requirements of Section 70914(a) of the Build America, Buy America Act (BABA) included in the Infrastructure Investment and Jobs Act (IIJA) (Pub. L. No. 117-58) for domestically assembled solar modules used in federal financial assistance awarded for infrastructure projects by the Office of the Greenhouse Gas Reduction Fund (OGGRF) within the Solar for All (SFA) program to specifically named entities. This waiver combines multiple project-specific nonavailability waivers into one document to reduce paperwork and support administrative efficiency. The EPA proposes to apply this waiver, if approved, to awards outlined in the Appendix.

The EPA's proposed waiver requires domestic assembly versus a waiver of the full manufactured product requirements, which would allow assembly to occur outside the United States. This waiver is intended to provide time needed for domestic solar module manufacturing capability to meet demand for BABA-compliant solar modules by supporting and encouraging continued investments while bringing the benefits of solar power to OGGRF's financial assistance recipients within the SFA program.

This proposed waiver would apply on or after the Effective Date until December 31, 2025, for all new solar modules with Final Assembly in the United States. Solar modules where final assembly occurred outside the United States are not eligible for coverage under this waiver. "Final Assembly" means all operations involved in the transformation of individual solar cells and all other module components into a fully functional encapsulated module. For recipient expenditures to be covered by this waiver, the solar modules will need to be installed by June 30, 2026. "Installed by" means modules being permanently fastened to an outdoor support structure at the project site. This requirement only applies to solar modules covered by this waiver and has no bearing on compliance determinations for other products nor for solar modules not covered by this waiver. For Awards and amendments that otherwise meet the criteria of the waiver but were obligated prior to the Effective Date, the waiver will apply to eligible expenditures incurred on or after the Effective Date of the final waiver for the period that the waiver is active.

In accordance with Section 70914(c) of the BABA, the EPA is providing notice that it is seeking a limited nonavailability partial waiver of the BABA manufactured product requirements for domestically assembled solar modules used in federal financial assistance awards for infrastructure projects due to

the determination that compliant solar modules are not available in sufficient quality or quantity for use in OGGRF-funded infrastructure projects within the SFA program. The EPA conducted market research to determine availability of BABA-compliant solar modules which included subject matter expert analysis of domestic solar production based on announcements and non-public manufacturing plans disclosed by manufacturers. Based on this market research, the EPA proposes to find that BABA-compliant solar modules are not produced in the United States in sufficient and reasonably available quantities for use in OGGRF-assisted solar projects within the SFA program and will not become available in sufficient and reasonably available quantities until December 2025 or later. This proposed waiver, if finalized, will ensure recipients can effectively carry out the activities of their award in a timely manner while promoting domestic solar module manufacturing. The EPA seeks to issue this waiver on the basis of nonavailability in accordance with Section 70914(b)(2) of the BABA.

Background

The Buy America preference set forth in section 70914(a) of BABA, 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) of BABA, 2 CFR 184.7 & 200.322, and in accordance with the Office of Management and Budget (OMB)'s Guidance Memorandum M-24-02, *Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure*, the EPA may waive the BABA Buy America preference under an infrastructure program in any case in which it finds that: (i) applying the domestic content procurement preference would be inconsistent with the public interest ("public interest waiver"); (ii) types of iron, steel, manufactured products, or construction materials are not produced in the U.S. in sufficient and reasonably available quantities or of a satisfactory quality ("nonavailability waiver"); or (iii) the inclusion of iron, steel, manufactured products, or construction materials produced in the U.S. will increase the cost of the overall project by more than 25 percent ("unreasonable cost waiver"). All waivers must have a written explanation for the proposed determination; provide a period of not less than fifteen (15) calendar days for public comment on the proposed waiver; and submit the proposed waiver to the OMB Made in America Office for review to determine if the waiver is consistent with policy. The EPA is providing fifteen (15) calendar days for public comment on this waiver.

With more than $100 billion in funding from Infrastructure Investment and Jobs Act ("IIJA"), Pub. L. No. 117-58, and H.R. 5376- Inflation Reduction Act of 2022 ("IRA"), the EPA is focused primarily on investing in projects that strengthen infrastructure, tackle climate change, and create a more equitable future. The EPA is committed to ensuring strong and effective domestic manufacturing capabilities consistent with Executive Order (EO) 14005 titled *Ensuring the Future is Made in All of America by All of America's Workers* (86 FR 7475) (Jan. 28, 2021). EO 14005 provides that the U.S. Government "should, consistent with applicable law, use terms and conditions of Federal financial assistance awards and Federal procurements to maximize the use of goods, products, and materials produced in, and services offered in, the United States."

The EPA provides grant funding to multiple recipients, subrecipients, and program participants with individual projects that utilize solar modules. Nationwide demand includes use by other federal agencies, state, local, and tribal governments, nonprofit organizations in addition to private consumers. The EPA, in collaboration with the U.S. Department of Energy (DOE) and the United States

Department of Agriculture (USDA), analyzed anticipated demand for projects that may include demand for BABA-compliant solar modules. The EPA requirement is estimated to be approximately 3,300 MWdc for BABA-compliant modules through 2028. For the DOE, the estimate is approximately 75 MWdc to 150 MWdc through 2026. For the USDA, the estimate is $80 million through 2025, corresponding to a nameplate capacity of 300 MWdc. The major driver for domestic solar supply-chain growth is the IRA tax credits, including the IRC §§48 and 45 clean energy investment and production tax credits and the IRC §§48E and 45Y "technology neutral" clean electricity investment and production tax credits, and the IRC §45X advanced manufacturing production tax credit, which provides per-unit tax credits for the domestic production of polysilicon, wafers, cells, modules, backsheet, tracker components, and inverters, with rates of $0.07 per Wdc for modules and $0.04 per Wdc for cells. Moreover, the 10% domestic content bonus in IRA tax credits will increase competition for domestically produced modules from private developers, which could further impact grant recipients' ability to procure BABA-compliant modules.

Solar modules are manufactured products. Per BABA sections 70912(6)(A) and (B), manufactured products are considered to be produced in the United States if (i) the manufactured product was manufactured in the United States; and (ii) the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation.

Solar module components were analyzed by the DOE. Market research included subject matter expert analysis of domestic solar production based on announcements and non-public manufacturing plans disclosed by manufacturers. The cost of the cell is estimated to constitute the majority (67%) of the cost of a module. DOE subject matter experts concluded cells will not likely be available from U.S. manufacturers in sufficient quantities until December 2025 or later. The next highest estimated module cost component is the metal frame, at 10%. Metal frames for c-Si modules are expected to be unavailable at a significant quantity from anywhere other than China for several years. The cost of the front glass and backsheet are each estimated at 7%, of the encapsulant at 4%, of the junction box at 3%, and all other components less than 1% each.

To support BABA compliance verification, the EPA is considering step-certification following the expiration of this waiver, which is a type of certification process under which each handler (supplier, fabricator, manufacturer, processor, etc.) of the subject products and materials certifies that their step in the process was domestically performed. Each time a step in the manufacturing process takes place, the manufacturer delivers its work along with a certification of its origin. This process is common practice for verifying Buy America requirements for iron and steel.

Waiver Justification

The EPA is proposing a temporary, limited nonavailability partial waiver of the BABA manufactured product requirements for solar modules to apply to the use of domestically assembled modules that may incorporate foreign components. The United States is the second largest market for solar hardware, representing about 10%-15% of global solar demand. Developing and enhancing United States solar manufacturing will mitigate global supply chain challenges and meet decarbonization goals as well as benefit United States' workers, employers, and the economy. To reestablish domestic solar

manufacturing in the United States, entities that produce and sell solar components will require a holistic industrial strategy to offset the 30-40% higher cost of domestic solar production relative to imported components. A narrowly tailored BABA waiver will meet immediate solar demands while the domestic solar industry expands supply through the operation of market forces.

Domestically, the United States currently has 10,600 MWdc/year nameplate production capacity for CdTe modules and 47,000 MWdc/yr nameplate production capacity for c-Si modules. Market research indicates c-Si module production capacity was historically underutilized for a variety of reasons including foreign competition, workforce shortages, and obsolete production equipment, with about 3,700 MWdc actually produced and sold in 2023 compared to a nameplate capacity of 15,000 MWdc/yr at the end of 2023. Capacity for c-Si modules has continued growing significantly in 2024 and as production is ramping, utilization rates are expected to grow. As of November 2024, domestic c-Si cell production in the United States has just restarted and production is also anticipated to grow.

In addition to current production capacity, future domestic manufacturing indicates growth will result in substantially more BABA-compliant module supply. As of November 2024, over $20 billion in planned solar investments have been announced at over 148 new and expanded manufacturing plants for modules, module parts and other hardware. DOE subject matter experts performed a probabilistic analysis of these announcements to identify a date when full BABA compliance may be achievable. Subject matter expert review identified technical delays from announced dates due to site readiness as well as likelihood of project success and considered the time required to ramp to full production capacities as well as announced offtake agreements. Overall analysis concludes that domestic manufactures will likely be capable of producing fully BABA-compliant modules in sufficient quantities for OGGRF financial assistance recipients, subrecipients and program participants within the SFA program no sooner than December 2025. Thus, the EPA proposes to find that BABA-compliant solar modules are not produced in the United States in sufficient and reasonably available quantities for use in OGGRF-assisted solar projects within the SFA program and will not become available in sufficient and reasonably available quantities until December 2025 or later.

Impact Absent the Waiver

Without a waiver, the EPA anticipates most recipients with solar projects subject to BABA will develop, implement, and submit individualized nonavailability waiver packages for solar modules. This conclusion is based upon widely reported domestic sourcing challenges for BABA-compliant solar modules. The corresponding administrative burden will impact the cost and schedule of recipients, and in some cases diminish the use of solar projects, or, in extreme cases, deter overall program participation. For those that participate and propose solar projects, recipient resources will be required to perform market research and submit nonavailability packages. Project schedules will need to be extended to account for waiver development and waiver processing though final approval. These anticipated delays adversely impact numerous agency goals of these projects, including climate action and energy justice.

The absence of a narrowly tailored BABA waiver will result in missed strategic opportunities to advance goals such as those within EO 14017 *American's Strategy to Secure the Supply Chain for a Robust Clean Energy Transition* and EO 14057 *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*, in addition to the goals of EO 14005.

A narrowly tailored BABA waiver will support the establishment of a domestic solar supply chain. Fundamentally, the domestic content provisions in the IRA clean energy production and investment tax credits, including relating to IRC §§ 45, 45X, 45Y, 48, and 48E, including the domestic content bonus credit, constitute the significant driver for increasing the overall demand for domestic solar modules. Requiring full BABA compliance for federal financial assistance projects, as opposed to the narrowly tailored BABA compliance proposed in this waiver, would produce limited benefits for domestic solar manufacturing while potentially placing projects targeting vulnerable populations at risk.

Assessment of Cost Advantage of a Foreign-Sourced Product

Under OMB Memorandum 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 waiver. The EPA's analysis has concluded that this assessment is not applicable to this waiver, because this waiver is not based on cost advantage of foreign sourced products.

Duration of Waiver

This proposed waiver, if finalized, applies to expenditures on solar panels after the Effective Date and by December 31, 2025, so long as those panels are installed by June 30, 2026.

Solicitation of Comments

The EPA has proposed to issue this waiver on the basis of nonavailability. This notice, posted on December 13, 2024, satisfies the requirement under section 70914 of BABA to publish any proposed BABA waiver and provide the public with a reasonable period of time for notice and comment. The EPA seeks public comment from all interested parties.

Input is sought from stakeholders, including, but not limited to, federal financial assistant applicants and recipients, subrecipients and program participants, manufacturers, installers and other stakeholders across sectors and geographies. In particular, the EPA seeks comment regarding the scope of this waiver and the following:

- Proposed dates of applicability, including effective date of the waiver and installed by date.
- Recommendations and comments regarding certification for BABA compliant solar modules. One approach may be step-certification following the expiration of this waiver, a type of certification process under which each handler (supplier, fabricator, manufacturer, processor, etc.) of the subject products and materials certifies that their step in the process was domestically performed. Each time a step in the manufacturing process takes place, the manufacturer delivers its work along with a certification of its origin.

Relevant information and comments will help the EPA to understand completely the facts surrounding the waiver request and the EPA's proposal. This notice will be closed for comments on December 28, 2024.

To receive consideration as a public comment, written comments should be sent to EPA_BABA_Waiver@epa.gov. Please place "2024 Solar Waiver" in the subject line when sending an email.

For more information on the Build America, Buy America preference, please reference www.MadeinAmerica.gov.

Confidential Business Information: Pursuant to 40 CFR 2.203(a), any person submitting information may assert a business confidentiality claim covering all or part of the information submitted to the EPA. Any person making such a claim should submit via email two well-marked copies: one copy of the document marked "confidential" including all the information believed to be confidential, and one copy of the document marked "non-confidential" with the information believed to be confidential deleted. Pursuant to 40 CFR 2.203(b), if confidential treatment is only requested until a certain date or until the occurrence of a certain event, the notice should so state. Information covered by a confidentiality claim will be disclosed by the EPA only to the extent, and by means of the procedures, set forth in 40 CFR Part 2 Subpart B. If no such claim accompanies the information when it is received by the EPA, it may be made available to the public by the EPA without further notice to the recipient. See 40 CFR 2.203(a)(2), 41 Fed. Reg. 36,907.

Appendix

Program	Recipient/Awardee
Greenhouse Gas Reduction Fund - Solar for All Program	Executive Office of the State of New Hampshire
Greenhouse Gas Reduction Fund - Solar for All Program	Massachusetts Department of Energy Resources
Greenhouse Gas Reduction Fund - Solar for All Program	Rhode Island Office of Energy Resources
Greenhouse Gas Reduction Fund - Solar for All Program	Connecticut Department of Energy and Environmental Protection
Greenhouse Gas Reduction Fund - Solar for All Program	Maine Governor's Energy Office
Greenhouse Gas Reduction Fund - Solar for All Program	Vermont Department of Public Service
Greenhouse Gas Reduction Fund - Solar for All Program	Inclusive Prosperity Capital, Inc.
Greenhouse Gas Reduction Fund - Solar for All Program	New Jersey Board of Public Utilities
Greenhouse Gas Reduction Fund - Solar for All Program	New York State Energy Research and Development Authority (NYSERDA)
Greenhouse Gas Reduction Fund - Solar for All Program	Puerto Rico Office of Management and Budget (Oficlna de Gerencia y Presupuesto de Puerto Rico)
Greenhouse Gas Reduction Fund - Solar for All Program	U.S. Virgin Islands Energy Office
Greenhouse Gas Reduction Fund - Solar for All Program	District of Columbia Government
Greenhouse Gas Reduction Fund - Solar for All Program	Maryland Clean Energy Center
Greenhouse Gas Reduction Fund - Solar for All Program	Pennsylvania Energy Development Authority
Greenhouse Gas Reduction Fund - Solar for All Program	Virginia Department of Energy
Greenhouse Gas Reduction Fund - Solar for All Program	West Virginia Office of Energy
Greenhouse Gas Reduction Fund - Solar for All Program	Groundswell Inc.
Greenhouse Gas Reduction Fund - Solar for All Program	Department of Environment & Conservation Tennessee
Greenhouse Gas Reduction Fund - Solar for All Program	Kentucky Energy and Environment Cabinet
Greenhouse Gas Reduction Fund - Solar for All Program	North Carolina Department Of Environmental Quality
Greenhouse Gas Reduction Fund - Solar for All Program	South Carolina Office of Resilience

Greenhouse Gas Reduction Fund - Solar for All Program	Hope Enterprise Corporation – Arkansas Solar for All
Greenhouse Gas Reduction Fund - Solar for All Program	Solar and Energy Loan Fund of St. Lucie County, Inc.
Greenhouse Gas Reduction Fund - Solar for All Program	The Capital Good Fund
Greenhouse Gas Reduction Fund - Solar for All Program	Illinois Finance Authority
Greenhouse Gas Reduction Fund - Solar for All Program	Minnesota Department of Commerce
Greenhouse Gas Reduction Fund - Solar for All Program	State of Michigan, Department of Environment, Great Lakes, and Energy
Greenhouse Gas Reduction Fund - Solar for All Program	Ohio Air Quality Development Authority
Greenhouse Gas Reduction Fund - Solar for All Program	Wisconsin Economic Development Corporation
Greenhouse Gas Reduction Fund - Solar for All Program	Indiana Community Action Association, Inc. (IN-CAA)
Greenhouse Gas Reduction Fund - Solar for All Program	Midwest Tribal Energy Resources Association Inc.
Greenhouse Gas Reduction Fund - Solar for All Program	Growth Opportunity Partners
Greenhouse Gas Reduction Fund - Solar for All Program	New Mexico Energy, Minerals, & Natural Resources Department
Greenhouse Gas Reduction Fund - Solar for All Program	State of Louisiana, Department of Natural Resources
Greenhouse Gas Reduction Fund - Solar for All Program	Harris County (TX)
Greenhouse Gas Reduction Fund - Solar for All Program	Hope Enterprise Corporation – Mississippi Solar for All
Greenhouse Gas Reduction Fund - Solar for All Program	Clean Energy Fund of Texas
Greenhouse Gas Reduction Fund - Solar for All Program	The Missouri Environmental Improvement and Energy Resources Authority
Greenhouse Gas Reduction Fund - Solar for All Program	Center for Rural Affairs
Greenhouse Gas Reduction Fund - Solar for All Program	Colorado Energy Office
Greenhouse Gas Reduction Fund - Solar for All Program	Utah Governors Office Of Energy Development
Greenhouse Gas Reduction Fund - Solar for All Program	Bonneville Environmental Foundation – Idaho Solar for All
Greenhouse Gas Reduction Fund - Solar for All Program	Bonneville Environmental Foundation – Montana Solar for All

Greenhouse Gas Reduction Fund - Solar for All Program	Coalition for Green Capital – North Dakota Solar for All
Greenhouse Gas Reduction Fund - Solar for All Program	Coalition for Green Capital – South Dakota Solar for All
Greenhouse Gas Reduction Fund - Solar for All Program	Oweesta Corporation
Greenhouse Gas Reduction Fund - Solar for All Program	Three Affiliated Tribes (The Mandan, Hidatsa and Arikara Nation (MHA Nation))
Greenhouse Gas Reduction Fund - Solar for All Program	Executive Office of the State of Arizona
Greenhouse Gas Reduction Fund - Solar for All Program	Government of Guam - Department of Administration
Greenhouse Gas Reduction Fund - Solar for All Program	Hawai‘i Green Infrastructure Authority
Greenhouse Gas Reduction Fund - Solar for All Program	California Public Utilities Commission
Greenhouse Gas Reduction Fund - Solar for All Program	Nevada Clean Energy Fund
Greenhouse Gas Reduction Fund - Solar for All Program	Hopi Utilities Corporation
Greenhouse Gas Reduction Fund - Solar for All Program	GRID Alternatives (Western Indigenous Network Solar For All)
Greenhouse Gas Reduction Fund - Solar for All Program	GRID Alternatives (Solar Access for Nationwide Affordable Housing Program)
Greenhouse Gas Reduction Fund - Solar for All Program	Alaska Energy Authority
Greenhouse Gas Reduction Fund - Solar for All Program	Oregon Department of Energy
Greenhouse Gas Reduction Fund - Solar for All Program	Washington State Department of Commerce
Greenhouse Gas Reduction Fund - Solar for All Program	Bonneville Environmental Foundation – Wyoming Solar for All
Greenhouse Gas Reduction Fund - Solar for All Program	Tanana Chiefs Conference