SUNGROW
Clean power for all

SUNGROW POWER SUPPLY CO., LTD | 575 MARKET STREET, SAN FRANCISCO, CA 94105

November 4, 2022

VIA ELECTRONIC SUBMISSION

Re: Notice 2022-51, Request for Comments on Prevailing Wage, Apprenticeship, Domestic Content, and Energy Communities Requirements

Sungrow Power Supply Co., Ltd. ("Sungrow") appreciates the opportunity to provide comments to the Department of the Treasury (Treasury Department) and the Internal Revenue Service (IRS) on certain provisions of Public Law 117-169, 136 Stat. 1818 (August 16, 2022), commonly known as the Inflation Reduction Act of 2022 (IRA).

BACKGROUND

Large-scale emission reductions in the United States will require deployment of renewable energy projects on a massive scale. Key to this deployment are the inverters and energy storage systems that Sungrow manufactures.

The inverter is one of the essential pieces of equipment in a solar energy system, as it converts direct current (DC) electricity, which is what a solar panel generates, to alternating current (AC) electricity, which is what the electrical grid uses. Without a properly operating inverter, solar production is impossible. Energy storage systems allow for the flexible use of energy at different times from when it was generated. Large-scale storage is going to be key to widescale renewable power deployment and ensuring a more resilient, reliable, and efficient energy grid.

Designing products that are dependable and bankable against the legacy energy technologies that renewables will displace is a complicated challenge[1]; inverters are highly technical products that require significant, long-term investments in research and development which result in high differentiation—driven by intellectual property—among the market leaders in the sector. The IRA will provide vital support in these areas and help stimulate a quicker transition to a renewables-based energy industry while generating economic development opportunities and creating jobs in the U.S. How the provisions in the IRA are implemented is critically important.

ABOUT SUNGROW

With over 269 GW installed worldwide as of June 2022, Sungrow is the world's largest inverter

[1] https://www.bloomberg.com/press-releases/2020-08-28/bloombergnef-awards-sungrow-a-100-bankability-rating-for-a-second-year

manufacturer operating in the United States[2]. Sungrow operates on the principle of driving renewables adoption through improvements in technology. Sungrow is a leader in the research, development and manufacturing of power inverters and energy storage products for renewable energy systems and electric vehicles, with the largest dedicated R&D team in the industry.

With a strong 25-year track record in the PV space, Sungrow products power critical infrastructure in over 150 countries worldwide. In the U.S., Sungrow's products are used in the utility, commercial and industrial solar markets. Sungrow supplies its products to the market through a large network of U.S.-based distributors, construction firms, project developers and utilities. In fact, Sungrow supplies utility-scale inverters to 1 of the top 20 EPC companies in the United States, most notably SOLV Energy—the Engineering, Procurement, and Construction ("EPC") firm with the most utility-scale installations in the US, comprising approximately 10% of all such projects[3]—being amongst Sungrow's largest customers.

Sungrow's Americas regional headquarters is located in San Francisco and the company has facilities in Arizona and Texas. The company has a large service and training center in Phoenix and a 42,000 square foot facility in Dallas that stores batteries for large scale energy storage projects for ERCOT grid. Sungrow's presence in the U.S. is growing at a rapid pace, and the company is preparing to open a new corporate hub in Houston, where it expects to further expand its corporate workforce and operate a 150,000 square foot operations center.

While Sungrow continues to grow its U.S. presence, the company's U.S. products are currently manufactured in the company's India and Thailand factories, which have capacities of 10 GW and 15 GW, respectively. Sungrow operates a global supply chain which requires components from the U.S., Europe and Asia. This diversified supply chain is not unique to the inverter industry – there is currently minimal production of inverter technology in the U.S.; while Sungrow's inverters may leverage the company's bankability, long track record of reliability, and volume of operating projects, the company shares the same business challenges and constraints with all other major suppliers in the inverter sector.

SUNGROW COMMENTS

.03 Domestic Content Requirement

(1) Sections 45(b)(9)(B) and 45Y(g)(11)(B) provide that a taxpayer must certify that any steel, iron, or manufactured product that is a component of a qualified facility (upon completion of construction) was produced in the United States (as determined under 49 C.F.R. 661).

(d) What records or documentation do taxpayers maintain or could they create to substantiate a taxpayer's certification that they have satisfied the domestic content requirements?

Taxpayers should provide detailed and comprehensive documentation from their suppliers that can be

[2] https://www.woodmac.com/press-releases/global-top-10-solar-pv-inverter-vendors-account-for-82-of-market-share/

[3] https://www.solarpowerworldonline.com/2022-top-solar-contractors/

traced to applicable documentation including, but not limited to, serial numbers, purchase orders, order invoices, and delivery receipts of produced units.

.03 Domestic Content Requirement

(2) Sections 45(b)(9)(B)(iii) and 45Y(g)(11)(B)(iii) provide that manufactured products that are components of a qualified facility upon completion of construction will be deemed to have been produced in the United States if not less than the adjusted percentage of the total costs of all of such manufactured products of such facility are attributable to manufactured products (including components) that are mined, produced, or manufactured in the United States.

(a) Does the term "component of a qualified facility" need further clarification? If so, what should be clarified and is any clarification needed for specific types of property, such as qualified interconnection property?

Sungrow agrees that the definitions of components in regard to domestic content should be clearly defined by the Department of Treasury for each eligible system type. For a solar system, it is our opinion that the modules, racking, inverters, transformer, and other operationally required balance of system units be considered as components. For a battery energy storage system, the battery cells and the module that encases those cells should be considered, along with the power conversion units and other balance of system components. It is important to note that the balance of system components for a solar site may differ from those required for battery energy storage sites, due to the differences between the equipment utilized.

(b) Does the determination of "total costs" with regard to all manufactured products of a qualified facility that are attributable to manufactured products (including components) that are mined, produced, or manufactured in the United States need further clarification? If so, what should be clarified? Is guidance needed to clarify the term "mined, produced, or manufactured"?

Sungrow believes the method of determination is clearly defined as the sum of the product costs, for the taxpayer, of the manufactured products that are eligible to claim domestic content. This does not mean that only products that meet domestic content are used in the determination of total costs, but rather that all products eligible are to be included in the total cost summary. However, the definitions related to what manufactured products are eligible must be clearly defined.

(c) Does the term "manufactured product" with regard to the various technologies eligible for the domestic content bonus credit need further clarification? If so, what should be clarified? Is guidance needed to clarify what constitutes an "end product" (as defined in 49 C.F.R. 661.3) for purposes of satisfying the domestic content requirements?

Having clear definitions of manufactured products for a system is critically important, as it would enable all suppliers to know if their products can contribute to projects passing the domestic content threshold. For each eligible system, the products that are eligible to qualify for bonus credit should be outlined. It is our opinion that any integral component, for the solar and storage markets, that is eligible should also be

defined as a manufactured product.

(e) Does the treatment of subcomponents with regard to manufactured products need further clarification? If so, what should be clarified?

Sungrow believes that qualitative approaches to define nationality of manufactured products should be considered, as this aligns with existing international trade practices utilized globally to define product nationality. Quantitative, sub-component cost approaches can also be utilized, but may be particularly difficult for certain products in solar and energy storage that depend on diverse supply chains. For example, most Sungrow inverter modules utilize subcomponents from at least three continents.