



**Department of Energy**  
Washington, DC 20585

ASSISTANT SECRETARY OF ENERGY  
FOR ENERGY EFFICIENCY AND RENEWABLE ENERGY

MEMORANDUM OF DECISION

**SUBJECT: Determination of inapplicability (waiver) of section 1605 of the American Reinvestment and Recovery Act of 2009 (Recovery Act Buy American provisions) to EERE-funded projects for 24-leaf, motorized DMX iris units; induction lamps and ballasts; Enphase micro-inverters for solar photovoltaic systems; commercial-scale high efficiency condensing boilers with indirect water heaters; large-format solar thermal collectors for integrated district heating systems; turbochargers for Mitsubishi/Man 52/55B diesel generator engine; and Liebert Variable Speed Upgrade Kits and Liebert iCOM Control Upgrade kits.**

Under the authority of Recovery Act, Pub. L. 111-5, section 1605(b)(2), the head of a federal department or agency may issue a "determination of inapplicability" (a waiver of the Buy American provision) if the iron, steel, or relevant manufactured good is not produced or manufactured in the United States in sufficient and reasonably available quantities and of a satisfactory quality ("nonavailability"). On November 10, 2009, the Secretary of Energy delegated the authority to make all inapplicability determinations to the Assistant Secretary for Energy Efficiency and Renewable Energy (EERE), for EERE projects under the Recovery Act. Pursuant to this delegation the Assistant Secretary, EERE, has concluded that 24-leaf, motorized DMX iris units; induction lamps and ballasts; Enphase micro-inverters for solar photovoltaic systems; commercial-scale high efficiency condensing boilers with indirect water heaters; large-format solar thermal collectors for integrated district heating systems; turbochargers for Mitsubishi/Man 52/55B diesel generator engine; and Liebert Variable Speed Upgrade Kits and Liebert iCOM Control Upgrade kits qualify for the "nonavailability" waiver determination.

EERE has developed a robust process to ascertain in a systematic and expedient manner whether or not there is domestic manufacturing capacity for the items submitted for a waiver of the Recovery Act Buy American provision. This process involves a close collaboration with the United States Department of Commerce National Institute of Standards and Technology (NIST) Manufacturing Extension Partnership (MEP), in order to scour the domestic manufacturing landscape in search of producers before making any nonavailability waiver determinations.

The NIST MEP has 59 regional centers with substantial knowledge of, and connections to, the domestic manufacturing sector. MEP uses their regional centers to 'scout' for current or potential manufacturers of the product(s) submitted in a waiver request. In the course of this interagency collaboration, MEP has been able to find exact or partial matches for manufactured goods that EERE grantees had been unable to locate. As a result, in those cases, EERE was able to work with the grantees to procure American-made products rather than granting a waiver.

Upon receipt of completed waiver requests for the seven products in the current waiver, EERE reviewed the information provided and submitted the relevant technical information to the NIST MEP. The MEP then used their network of nationwide centers to scout for domestic manufacturers. The NIST MEP reported that their scouting process did not locate any domestic manufacturers for these exact or equivalent items.

In addition to the MEP collaboration outlined above, the EERE Buy American Coordinator worked with labor unions, trade associations and other manufacturing stakeholders to scout for domestic manufacturing capacity or an equivalent product for each item contained in this waiver. EERE also conducted significant amounts of independent research to supplement MEP's scouting efforts, including utilizing the solar experts employed by the Department of Energy's National Renewable Energy Laboratory. EERE's research efforts confirmed the MEP findings that the goods included in this waiver are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality.

The nonavailability determination is also informed by the inquiries and petitions to EERE from recipients of EERE Recovery Act funds, and from suppliers, distributors, retailers and trade associations—all stating that their individual efforts to locate domestic manufacturers have been unsuccessful.

Specific technical information for the manufactured goods included in this non-availability determination is detailed below:

(1) 24-leaf, motorized DMX iris units

These items are used in conjunction with a Source 4 lighting instrument in the theatrical lighting business.

(2) Induction lamps and ballasts

The lamps (bulbs) and ballasts for induction lighting systems. This waiver does not include fixtures for induction lighting, which are readily available from domestic manufacturers.

(3) Enphase micro-inverters for solar photovoltaic systems

Micro-inverters shift DC to AC power conversion from a large, centralized inverter to a series of compact units attached directly to each solar module. Micro-inverters allow for higher efficiency energy conversion and increased reliability as compared to traditional inverter systems.

(4) Commercial-scale high efficiency condensing boilers with indirect water heaters

Gas or propane, high efficiency condensing wall hung boiler with indirect water heater, 94% or greater efficiency and a BTU output below 350,000, constructed with SA240-316 Ti stainless steel.

(5) Large-format solar thermal collectors for integrated district heating systems

Includes only high-performance flat plate solar collectors that possess three technical characteristics:

- The ability to limit the convective heat loss from the absorber plate to the cover glass, effectively minimizing heat losses to less than 2.6 W/m<sup>2</sup>K
- Capable of sustaining output temperatures of 195 degrees F
- Gross collector area of greater than 150 ft<sup>2</sup>

(6) Turbocharger for Mitsubishi/Man 52/55B diesel generator engine to replace an existing MAN/NA48T turbocharger

(7) Liebert Variable Speed Upgrade Kits and Liebert iCOM Control Upgrade kits for the Liebert Chilled Water Deluxe heating, cooling, and humidification space conditioner

In light of the foregoing, and under the authority of section 1605(b)(2) of Public Law 111–5 and Redesignation Order 00-002-01C, dated November 10, 2009, with respect to Recovery Act projects funded by EERE, I hereby issue a “determination of inapplicability” (a waiver under the Recovery Act Buy American provision) for 24-lamp, motorized DMX iris units; induction lamps and ballasts; Enphase micro-inverters for solar photovoltaic systems; commercial-scale high efficiency condensing boilers with indirect water heaters; large-format solar thermal collectors for integrated district heating systems; turbochargers for Mitsubishi/Man 52/55B diesel generator engine; and Liebert Variable Speed Upgrade Kits and Liebert iCOM Control Upgrade kits meeting the specifications detailed above in (1) through (7).

This waiver determination is pursuant to the delegation of authority by the Secretary of Energy to the Assistant Secretary for Energy Efficiency and Renewable Energy with respect to expenditures within the purview of her responsibility. Consequently, this waiver applies only to EERE projects carried out under the Recovery Act.

Furthermore, I reserve the right to revisit and amend this determination based on new developments or changes in the domestic manufacturing capacity for these seven product types.



Cathy Zoi  
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U.S. Department of Energy

Date: \_\_August 11, 2010\_\_