



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 (1) Absorption chillers rated at 205 and 250 tons; 2) Thermostatic Regulator Valves that regulate the flow of hot water or low pressure steam through free-standing radiators, baseboards, or convectors in hot water and two-pipe steam systems; 3) 28 and 30 W 180 degree LED replacement bulbs for HID street lights; 4) 100% Oil free rotary screw variable speed drive water cooled air compressor with a factory installed dryer capable of supplying air at <-20 degree dew point temperature; 5) high speed electronic governors with actuators to replace existing mechanical UG8 and UG40 engine governors; upgraded fuel injectors and regulators; and replacement engine pistons and cylinder liners; for energy efficiency upgrades in an existing Mitsubishi 52/55B or 40/54A diesel generator engine; and 6) Universal control modules for use with Novar proprietary communication protocols.

Under the authority of American Recovery and Reinvestment Act of 2009 (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"). The authority of the Secretary of Energy to make all inapplicability determinations was re-delegated to the Assistant Secretary for Energy Efficiency and Renewable Energy (EERE), for EERE projects under the Recovery Act, in Redelegation Order No. 00-002.01E, dated April 25, 2011. Pursuant to this delegation the Acting Assistant Secretary, EERE, has concluded that: 1) Absorption chillers rated at 205 and 250 tons; 2) Thermostatic Regulator Valves that regulate the flow of hot water or low pressure steam through free-standing radiators, baseboards, or convectors in hot water and two-pipe steam systems; 3) 28 and 30 W 180 degree LED replacement bulbs for HID street lights; 4) 100% Oil free rotary screw variable speed drive water cooled air compressor with a factory installed dryer capable of supplying air at <-20 degree dew point temperature; 5) high speed electronic governors with actuators to replace existing mechanical UG8 and UG40 engine governors; upgraded fuel injectors and regulators; and replacement engine pistons and cylinder liners; for energy efficiency upgrades in an existing Mitsubishi 52/55B or 40/54A diesel generator engine; and 6) Universal control modules for use with Novar proprietary communication protocols, are not produced or manufactured in the United States in sufficient and reasonably available quantities and

of a satisfactory quality. The above items, when used on eligible EERE Recovery Act-funded projects, 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 determinations.

The 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 six products in the current waiver, EERE reviewed the information provided and submitted the relevant technical information to the MEP. The MEP then used their network of nationwide centers to scout for domestic manufacturers. The 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 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 for these items have been unsuccessful.

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

- 1) Absorption chillers rated at 205 and 250 tons

This is the third waiver request for absorption chillers, but we had not examined the market for US manufacturers of this size in the past, there were no US responses to either rfp nor to the MEP request, EERE could identify no US manufacturers that could produce chillers meeting the specifications.

- 2) Thermostatic Regulator Valves regulate the flow of hot water or low pressure steam through free-standing radiators, baseboards, or convectors in hot water and two-pipe steam systems.
Includes the valves and actuators. These valves provide fast acting modulating control of the space temperature through a vapor charge, ensuring the highest level of comfort control. They are an inexpensive item, a search through the library at a local plumbing supply company revealed 12 potential suppliers, none of whom manufacture these valves in the US. MEP did not reveal any potential or current manufacturers.
- 3) 28 and 30 W 180 degree LED replacement bulbs for HID street lights
Only for these unique wattages where no other bulbs will fit. No US manufacturer was identified that produced a product with this wattage by MEP or EERE.
- 4) 100% Oil free rotary screw variable speed drive water cooled air compressor with a factory installed dryer capable of supplying air at <-20 degree dew point temperature.
The compressed air needs to be oil free and supplied with no humidity because it will damage the process equipment connected to the system, and in addition, as the product manufactured is hygroscopic in nature, it will tend to absorb humidity of the air thus damaging the product. MEP and DOE originally identified 2 possible matches, however, neither could provide air with the required humidity levels.
- 5) High speed electronic governors with actuators to replace existing mechanical UG8 and UG40 engine governors; upgraded fuel injectors and regulators; and replacement engine pistons and cylinder liners; for energy efficiency upgrades in an existing Mitsubishi 52/55B or 40/54A diesel generator engine
These upgrades will improve fuel efficiency and to allow the plant to begin using ultra-low sulfur diesel fuel (< 15ppm) - to comply with US EPA 2010 Emissions Regulation- because the engines were originally made in Japan, the only suppliers of these parts identified were Japanese or German.
- 6) Universal control modules for use with Novar proprietary communication protocols, where a Novar system was installed previously, and where utilizing a domestic control module would mean that the existing energy management controls would have to be removed and a new energy management controls system would have to replace the existing Novar system.
In these cases, the grantee is unable to use a domestic control module because the existing system runs off of a proprietary communication protocol (rather than LON or BACnet), and the entire system would have to be replaced to install additional controllers. Trade organizations, DOE and MEP all agreed that this was the only controller capable of properly interfacing with this protocol.

In light of the foregoing, and under the authority of section 1605(b)(2) of Public Law 111-5 and Redelegation Order 00-002-01E, 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: (1) Absorption chillers rated at 205 and 250 tons; 2) Thermostatic Regulator Valves that regulate the flow of hot water or low pressure steam through free-standing radiators, baseboards, or convectors in hot water and two-pipe steam systems; 3) 28 and 30 W 180 degree LED replacement bulbs for HID street lights; 4) 100% Oil free rotary screw variable speed drive water cooled air compressor with a factory installed dryer capable of supplying air at <-20 degree dew point temperature; 5) high speed electronic governors with actuators to replace existing mechanical UG8 and UG40 engine governors; upgraded fuel injectors and regulators; and replacement engine pistons and cylinder liners; for energy efficiency upgrades in an existing Mitsubishi 52/55B or 40/54A diesel generator engine; and 6) Universal control modules for use with Novar proprietary communication protocols.

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 his 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 six product types.



Henry C. Kelly
Acting Assistant Secretary
Energy Efficiency and Renewable Energy
U.S. Department of Energy

Date: 10-24-11