



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) piping systems made of “polypropylene random” material that meets the ASTM standard F2389; 2) 4.5 Ton air-to water outdoor split-type heat pumps; 3) 100 ton absorption chillers (using oil); 4) Engine block replacement for an existing Mitsubishi 52/55B or 40/54A diesel generator engine that will be used on eligible EERE- Recovery Act funded projects.

This waiver expires May 1, 2013.

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 Redlegation Order No. 00-002.01E, dated April 25, 2011. Pursuant to this delegation the Acting Assistant Secretary, EERE, has concluded that: 1) piping systems made of “polypropylene random” material that meets the ASTM standard F2389; 2) 4.5 Ton air-to water outdoor split-type heat pumps; 3) 100 ton absorption chillers (using oil); 4) Engine block replacement for an existing Mitsubishi 52/55B or 40/54A diesel generator engine that will be used on eligible EERE- Recovery Act funded projects, 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 at this time, for a limited period of time, until May 1, 2013.

In order to utilize this waiver, grantees must have taken substantial steps towards procurement of these items by May 1, 2013.

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 four 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.

In light of the foregoing, and under the authority of section 1605(b)(2) of Public Law 111-5 and Redesignation 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) piping systems made of "polypropylene random" material that meets the ASTM standard F2389; 2) 4.5 Ton air-to water outdoor split-type heat pumps; 3) 100 ton absorption chillers (using oil); 4) Engine block replacements for an existing Mitsubishi 52/55B or 40/54A diesel generator engine. This waiver expires May 1, 2013.

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, Redesignation Order No.

00-002.01F, dated October 31, 2012. Consequently, this waiver applies only to EERE projects carried out under the Recovery Act.

Recipients of EERE Recovery Act funds who have taken substantial steps to commit funds for the purchase of the items covered in this waiver by May 1, 2013 will not be impacted by the expiration of this waiver.

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



Dr. David T. Danielson
Assistant Secretary
Energy Efficiency and Renewable Energy
U.S. Department of Energy

Date:

11/28/12.



Department of Energy
Washington, DC 20585

[6450-01-P]

DEPARTMENT OF ENERGY

Office of Energy Efficiency and Renewable Energy

**Nationwide Categorical Waivers under Section 1605 (Buy American) of the
American Recovery and Reinvestment Act of 2009 (Recovery Act)**

AGENCY: Office of Energy Efficiency and Renewable Energy, U.S. Department of Energy (DOE).

ACTION: Notice of Limited Waivers

SUMMARY: The U.S. Department of Energy (DOE) is hereby granting a nationwide limited waiver of the Buy American requirements of section 1605 of the Recovery Act under the authority of Section 1605(b)(2), (iron, steel, and the relevant manufactured goods are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality), with respect to Recovery Act projects funded by EERE for: 1) piping systems made of “polypropylene random” material that meets the ASTM standard F2389 (where alternative systems have been considered, and no alternative meets the needs of the project); 2) 4.5 Ton air-to water outdoor split-type heat pumps; 3) 100 ton absorption chiller (using oil); 4) Engine block replacements for an existing Mitsubishi 52/55B or 40/54A diesel generator engine.. This waiver expires May 1, 2013.

DATES: Effective Date: 11/14/2012



FOR FURTHER INFORMATION CONTACT: Christine Platt-Patrick, Office of Energy Efficiency and Renewable Energy (EERE), (202) 287-1553, Department of Energy, 1000 Independence Avenue, SW., Mailstop EE-2K, Washington, DC 20585.

SUPPLEMENTARY INFORMATION: 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, as stated in Redlegation Order No. 00-002.01F, dated October 31, 2012. Pursuant to this delegation the Acting Assistant Secretary, EERE, has concluded that: 1) piping systems made of “polypropylene random” material that meets the ASTM standard F2389; 2) 4.5 Ton air-to water outdoor split-type heat pumps; 3) 100 ton absorption chiller (using oil); 4) Engine block replacements for an existing Mitsubishi 52/55B or 40/54A diesel generator engine, 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.

In order to utilize this waiver, grantees must have taken substantial steps towards procurement of these items by May 1, 2013.

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 four 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) Piping systems made of "polypropylene random" material that meets the ASTM standard F2389;
- 2) 4.5 Ton air-to water outdoor split-type heat pumps;
- 3) 100 ton absorption chiller (using oil);
- 4) Engine block replacements for an existing Mitsubishi 52/55B or 40/54A diesel generator engine.

Domestic manufacturers are working to enter the market in the near future, however, production of the above listed items cannot yet meet the needs of current projects. EERE

is committed to assisting grantees to complete projects while supporting domestic manufacturing- thus this waiver will expire May 1, 2013.

In light of the foregoing, and under the authority of section 1605(b)(2) of Public Law 111-5 and Redelelegation 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) piping systems made of “polypropylene random” material that meets the ASTM standard F2389; 2) 4.5 Ton air-to water outdoor split-type heat pumps; 3) 100 ton absorption chiller (using oil); 4) Engine block replacements for an existing Mitsubishi 52/55B or 40/54A diesel generator engine. This waiver expires May 1, 2013.

Having established a proper justification based on domestic nonavailability, EERE hereby provides notice that on November 14, 2012, four (4) nationwide categorical waivers of section 1605 of the Recovery Act were issued as detailed *supra*. This notice constitutes the detailed written justification required by Section 1605(c) for waivers based on a finding under subsection (b).

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 to all EERE projects carried out under the Recovery Act.

Authority: Pub. L. 111-5, section 1605.

Issued in Washington, DC on _____.



11/20/12.

Dr. David T. Danielson
Assistant Secretary
Energy Efficiency and Renewable Energy
U.S. Department of Energy



Department of Energy
Washington, DC 20585

November 8, 2012

MEMORANDUM FOR: DAVID T. DANIELSON, PH.D.
ASSISTANT SECRETARY
ENERGY EFFICIENCY AND RENEWABLE ENERGY

THROUGH: STEVEN G. CHALK
ACTING DEPUTY ASSISTANT SECRETARY FOR
RENEWABLE ENERGY
OFFICE OF TECHNOLOGY DEVELOPMENT
ENERGY EFFICIENCY AND RENEWABLE ENERGY

FROM: CHRISTINE PLATT-PATRICK
WEATHERIZATION AND INTERGOVERNMENTAL PROGRAM
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY

SUBJECT: **ACTIONS:**
1) Approval of determination of inapplicability ("nonavailability" waiver) of section 1605 of the Recovery Act of 2009 (the Buy American provision) for listed technologies specified *infra*.
2) Approval to publish determinations in the *Federal Register*.

ISSUES:

- 1) Whether to approve determination of inapplicability ("nonavailability" waiver) of section 1605 of the Recovery Act of 2009 (the Buy American provision) for 1) piping systems made of "polypropylene random" material that meets the ASTM standard F2389; 2) 4.5 Ton air-to water outdoor split-type heat pumps; 3) 100 ton absorption chillers (using oil); 4) Engine block replacements for an existing Mitsubishi 52/55B or 40/54A diesel generator engine that will be used on eligible EERE- Recovery Act funded projects.
These waivers expire May 1, 2013
- 2) Whether to publish the above in the *Federal Register*.

BACKGROUND:

Under the authority of American Recovery and Reinvestment Act of 2009 (Recovery Act), Pub. L. No. 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.

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.

The EERE Buy American Coordinator worked with manufacturing stakeholders to scout for domestic manufacturing capacity or an equivalent product for the item contained in this waiver. EERE also conducted significant amounts of independent research to supplement these scouting efforts. 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) “polypropylene random” material that meets the ASTM standard F2389
North Dakota ARRA SEP grantee Minot State University’s ground source heat pump project has already used a certain type of piping prior to ARRA funding that they must match. No US manufacturers were identified by DOE experts or MEP.
Convert whole campus to geothermal, 2 million dollar grant – 3 building conversion on the campus.

Submitted by ND Department of Commerce, June 28,2012. Cost \$45,764.00

2) 4.5 Ton air-to water outdoor split-type heat pumps

The heat pumps are to be installed at the 17 unit Saxman Senior Center in Saxman Alaska. Total project cost, including labor and materials, design and commissioning, is estimated to be \$50,000, depending on additive alternates for solar hot water panels in the final scope of work. The project will use other funding in addition to the EECBG funds to complete.

The Saxman Senior Center is 27,540 square feet. It has a 2-story 16,000 SF residential wing for seniors, consisting of 17 units of affordable housing. It has 11,000 SF of common public areas for seniors, including a full kitchen for cooking meals, and areas for socialization and wellness activities for seniors within their community.

The building is all-electric, using locally generated hydroelectricity purchased from Ketchikan Public Utilities.

To lower electrical operating costs, THRHA plans to use an air-to-water heat pump to heat domestic hot water and hydronic heating. An option is to integrate solar hot water panels with the system, funding permitting. The Daikin Altherma heat pump system will require two 4.5 Ton air-to water outdoor split-type heat pumps. The units must have an efficiency rating of 4.03 COP and be capable of producing 54,600 BTU's per hour (nominal) each. The system must have all H2O piping indoors and must be able to operate at temperatures as low as -4 degrees F. without extra insulation to prevent freeze-up. The system must have an inverter controlled outdoor compressor for energy efficiency and precise temperature control. The system has a built-in electric back-up heater for additional heating during extremely cold outdoor temperatures or as backup in case of problems with the outdoor unit. The system must have the capacity for optional solar connection kit and solar boiler.

The system that THRHA proposes to use is the Daiken Altherma. The Daiken is not made in the USA. It has been in use in Europe for many years. The system will incorporate some components made in the USA such as a SuperStore Ultra SSU-119C 119 gallon indirect heat exchanger tank, various valves, piping and controls, but THRHA has not located a similar system made in the USA to the Daikin Altherma with the same functions, capacity, or efficiency.

Organized Tribes of Saxman , July 2012. Project cost, including labor and materials, design and commissioning, is estimated to be \$50,000, depending on additive alternates for solar hot water panels in the final scope of work. The project will use other funding in addition to the EECBG funds to complete

3) 100 ton absorption chiller (using oil)

These are simply no longer made in the US, this will be our fourth absorption chiller issue, it is unclear why no US manufacturing of this item is occurring.

Miami Dade, June 2012 The cost of the absorption is approximately \$140,000 plus installation cost of \$9,600. The cost of the project is approximately \$22,891,177. "Improvements to the existing "Cogeneration Facility" which includes the installation of (4) new cogeneration units and the construction of a new electrical building. The Landfill Gas Pipeline project combined with this project is titled "Methane Sequestration Project", activity # 5 in the grant. The gas pipeline will transport the "Landfill Gas from the Solid Waste, South Dade Landfill to the Cogeneration building."

4) Engine block replacement for an existing Mitsubishi 52/55B or 40/54A diesel generator engine

In 2009, the right side cylinder block on engine#5 suffered a crack in the cylinder#5 bore area. Due to this crack - engine#5 had to be de-rated by approximately 50% of nameplate rating; from 12.6MW to 6.0MW.

The net effect of this de-rating resulted in:

1. Drop in power plant capacity by 6.6MW
2. Major drop in fuel efficiency for engine #5.
3. Higher fuel cost to operate engine#5

The reason for the drop in fuel efficiency is due to the fact that diesel engines are designed to operate at their most efficient load levels of between 75% to 100%. Fuel efficiency drops off significantly below 70% load and is considered poor at loads of 50% or lower.

In order to restore the capacity of engine#5 back to 12.6MW, and thereby improve the fuel efficiency - the cracked cylinder block on this machine must be replaced.

CNMI, October 2012. The grant award for the engine parts and radiators \$4,456,000; total cost for radiators and engine parts\$5,633,167 (Excludes the cost of the performance Bonds)

OPTIONS:

Issuing this waiver will allow numerous EERE Recovery Act financial assistance recipients to move forward with their projects.


In addition, section 1605(c) of the Recovery Act requires the head of a Federal department or agency to publish in the *Federal Register* a detailed written justification as to why the provision is being waived. Section 176.80 (b)(2) of Title 2 of the Code of Federal Regulations requires the head of the Federal department or agency to publish a notice in the *Federal Register* within two weeks after making the determination of inapplicability under section 1605 of the Recovery Act (granting a waiver of the Buy American provisions). Publishing this waiver in the *Federal Register* in a timely manner will comply with these requirements.

Non-issuance of the waiver would prevent a number of individual EERE financial assistance recipients from spending money quickly on critical, high-value projects in their communities. The goods included in this waiver are not produced in the United States, so recipients would have to change their project plans – causing substantial delays-- if the waiver is not issued.

RECOMMENDATIONS:

- 1) The EERE Buy American Coordinator recommends that the Assistant Secretary sign the attached Memorandum of Decision granting the determination of inapplicability (“nonavailability” waiver) of section 1605 of the Recovery Act of 2009 (the Buy American provision) for determination of inapplicability (“nonavailability” waiver) of section 1605 of the Recovery Act of 2009 (the Buy American provision) for 1) piping systems made of “polypropylene random” material that meets the ASTM standard F2389; 2) 4.5 Ton air-to water outdoor split-type heat pumps; 3) 100 ton absorption chiller (using oil); 4) Engine block replacements for an existing Mitsubishi 52/55B or 40/54A diesel generator engine that will be used on eligible EERE- Recovery Act funded projects.

- 2) The EERE Buy American Coordinator further recommends that the Assistant Secretary sign the attached *Federal Register* Notices such that the waivers can be published in the *Federal Register* as required by statute.

Approve:  Disapproved: _____ Date: 11/20/12

CONCURRENCE: GC 61- Beth Kelly