

PRODUCT CHANGES AND DISRUPTIONS FOR LARGE ELECTRIC WATER HEATERS

What are the options for plumbers and consumers?

A new U.S. Department of Energy (DOE) energy efficiency rule took effect on April 16, 2015, impacting the type of water heaters available across the country. The rule, which was an update to the National Appliance Energy Conservation Act (NAECA) standards, bans certain types of water heaters that DOE considers inefficient. This has the greatest effect on residential water heaters larger than 55 gallons, as DOE has greatly restricted the types of large electric water heaters that manufacturers can make. What does this mean if a consumer is looking to purchase or replace a large water heater?

Currently Available Options: Below are several options available to consumers who need to install or replace a large electric water heater. The right selection will ultimately be up to the customer and the circumstance. Please contact your local electric cooperative for more information on available products and rebates or incentives.



Discontinued
New Model Available

Changes to the DOE rules can be seen on Home Depot's Web Site where several water heater models have been discontinued. To see all options, consumers may want to search for Web sites for commercial water heaters and heat pump water heaters.

1) Hybrid Electric Heat Pump Water Heaters – Hybrid electric heat pump water heaters use less electricity than traditional electric resistance water heaters, but also have additional space and plumbing requirements, and are more expensive to purchase. Available in 50 to 80 gallon sizes. Check with your local cooperative to learn more about this option.

2) Heavy Duty / Commercial Water Heaters – At least two major manufacturers (Rheem and HTP/Westinghouse) offer 80 to 115 gallon heavy duty or commercial products that are similar to traditional electric resistance water heaters. These products have similar efficiencies as high efficient water heaters, but are not rated using the same system used for residential products. These water heaters can be an appropriate option where there is heavy hot water use or for consumers participating in co-op supported load control programs. These products can deliver water at higher temperatures than residential models so care should be taken to ensure the units are set to a safe temperature, such as 120 degrees F or less. Please consult with the manufacturers for guidance on temperature setting. These are available at big box stores or other suppliers in the commercial water heater section.

3) Smaller Water Heaters – One or more small water heaters interconnected or installing water heaters in multiple areas of a home that are far apart may meet the need of consumers with large hot water use. However, using only one small tank may not qualify for co-op load control program rebates or incentives.

4) Grid-Enabled Water Heaters – In April 2015, a new water heating product called “grid-enabled water heaters” was established by Congress. These large capacity water heaters, 75 gallons and larger, are specifically made for use in electric utility load control programs. The market for these water heaters is developing and products are expected to be more readily available in 2016 and beyond. Vaughn Thermal Corp. currently produces a “grid-enabled” product and other manufacturers, including AO Smith, are expected to have product offerings in 2016.

COSTS AND SIZE NEW UNITS: It is unclear how prices will be affected over the long-term by the changes in DOE's rules, but they will likely increase. Due to increases in the insulation or heat pump technology required to meet the new standard, replacement products may be wider and taller than previously available models.

NATURAL GAS, OIL, AND TANKLESS GAS WATER HEATERS: Almost all residential water heaters manufactured in the U.S. are affected by the new DOE rule. Though this document focuses on electric water heaters, natural gas and other water heaters will be similarly affected. Natural gas water heaters will also increase in size, will have new technology and installation requirements for the larger units, and will likely be more expensive.