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**2024 International Energy Conservation Code**

## SECTION R202 GENERAL DEFINITIONS

**Add text as follows:**

Thermal Energy Storage Heating System: A non-portable heating system, with a nameplate capacity of not less than 5 kWh, that adds heat to a storage medium which is subsequently used to provide energy for the heating of the interior of a building. The heat storage medium consists of a phase change or solid storage material.

## SECTION R408 ADDITIONAL EFFICIENCY REQUIREMENTS

**Add text as follows:**

~~R408.2.10 Thermal Energy Storage Heating System. Thermal Energy Storage Heating System shall be permitted for compliance with R403.7.1 if the product is part of a utility demand response program or in a contract with third party demand response provider of not less than 5 years.~~

## SECTION R403

**R403.7 Equipment sizing and efficiency rating.** Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies. New or replacement heating and cooling equipment shall have an efficiency rating equal to or greater than the minimum required by federal law for the geographic location where the equipment is installed.

**Revise as follows:**

**R403.7.1 Electric-resistance space heating.** Detached one- and two-family dwellings and townhouses in Climate Zones 4 through 8 using electric -resistance space heating shall limit the total installed heating capacity of all electric-resistance space heating serving the dwelling unit to no more than 2 kW, or shall install a heat pump in the largest space that is not used as a bedroom.

**Exception:**

1. This limit does not apply to thermal energy storage heating systems.

**Reason:** The definition of thermal energy storage is aligned with the US tax code for incentives through investment tax credits (26 U.S. Code § 48). These definitions are necessary to ensure that code compliance paths include thermal storage technology, which has been identified as a national priority by Congress. The minimum size of 5kW ensures that the system will keep home energy use off peak, which is the primary purpose and function of the devices.

**Cost Impact:** Will not increase the cost of construction.

This proposal adds no substantive requirements and, thus, does not add to the cost of construction.