

GEW58-14

604.1

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Revise as follows:

604.1 Establishing an open and interoperable automated demand-response (Auto-DR) infrastructure. Where this section is indicated to be applicable in Table 302.1, buildings that contain heating, ventilating, air-conditioning (HVAC) or lighting systems shall comply with Sections 604.1 through 604.4. A building energy management and control system (EMCS) shall be provided and integrated with building HVAC systems controls and lighting systems controls to receive an open and interoperable automated demand-response (Auto-DR) relay or Internet signal. Building HVAC and lighting systems and specific building energy-using components shall incorporate preprogrammed demand response strategies that are automated with a demand response automation Internet software client.

Exception: Auto-DR infrastructure is not required for the following:

- ~~1. Buildings located where the electric utility or regional Independent System Operator (ISO) or Regional Transmission Operator (RTO) does not offer a demand response program to buildings regulated by this code.~~
1. Buildings with a peak electric demand not greater than 0.75 times that of the standard reference design.
2. Buildings that have incorporated onsite renewable energy generation to provide 20 percent or more of the building's energy demand.

Reason: This proposal would remove the current exception to the automated demand-response infrastructure requirement for buildings located where the utility or regional Independent System Operator (ISO) or Regional Transmission Operator (RTO) do not yet offer a demand response program. Demand response is becoming an increasingly important tool to manage demand on the grid and integrate variable energy resources. Most recently, demand response played a critical role in preventing power outages during the extreme cold temperatures in January 2014. Demand response capabilities are easiest and cheapest to integrate into a building when it is first constructed and building systems and their controls are first installed. Many utilities, ISOs and RTOs already offer demand response programs and the number of programs and the need for demand response is only likely to grow going forward. Even if a demand response program does not exist at the time of construction, it is likely that one will be developed over the life of the building. Furthermore, integrating demand-response infrastructure into buildings provides a demand response resource which will facilitate the creation of demand response programs. Given the high benefits of and need for demand response, and the relative ease and low cost of integrating these capabilities at the time of construction we recommend removing the exception for buildings located in an area without a current DR program.

Cost Impact: Will increase the cost of construction.

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