To Whom It May Concern:

Enterprise Green Communities criterion 5.1b (Building Performance Standard New Construction: Multifamily buildings, four stories or more) requires the following:

- Meet the ENERGY STAR Multifamily High-Rise program (MFHR) guidelines. Projects permitted on or after January 1, 2012 must be certified through the ENERGY STAR MFHR program. See the “Recommendations” section for the Enterprise Green Communities implementation timeline for the ENERGY STAR MFHR program.

OR

- Multifamily buildings that are four or five stories, in which all units have their own heating, cooling, and hot water systems, separate from other units, may choose to comply with Criterion 5.1a and meet the requirements of ENERGY STAR New Homes Version 2.5 or 3.
- Projects in California, regardless of size, must exceed by 15% the version of Title 24 under which the project is permitted.

In heating-dominated climates, the following sections of MFHR have been brought to our attention:

**Garages and Sidewalks**

17. Garages shall not be heated for comfort or to prevent pipes from freezing. Piping design and layout shall locate piping within conditioned spaces or grouped and properly insulated to prevent freezing. If heat tracing is used for freeze protection, it must be activated based on pipe wall temperature, rather than air temperature, and the energy consumption must be modeled in the As-Built (but excluded in the Baseline). The heat tracing thermostat set point must be no higher than 40°F and the set point must be confirmed by a field inspection.

18. Radiant heating, either wall or ceiling-mounted or within the garage floor (or sidewalks) may be used to prevent ice formation on the ground as a safety feature only and temperature-based controls must comply with ASHRAE 90.1-2007 Section 6.4.3.8. Energy
consumption associated with these systems must be modeled in the As-Built (but excluded in the Baseline).

In these areas of the country, where the heating of garages is important for matters of safety, projects are not prohibited from heating their garage if it serves to prevent ice formation on the ground (i.e. safety reasons) rather than for comfort reasons, and the heating system has the controls described in ASHRAE 90.1-2007 Section 6.4.3.8 (see below) to turn off when the pavement temperature is 50 F or warmer and outdoor air temperature is 40 F or warmer. In this case, the project must follow the MFHR performance path, and the garage in the Baseline Building energy model may not be heated and must be modeled with an insulated garage ceiling. If the project, following these guidelines, still meets the Performance Target with that energy penalty, the project may still qualify and certify to the MFHR program.

ASHRAE 90.1-2007 Section 6.4.3.8

Freeze Protection and Snow/Ice Melting Systems.

Freeze protection systems, such as heat tracing of outdoor piping and heat exchangers, including self-regulating heat tracing, shall include automatic controls capable of shutting off the systems when outdoor air temperatures are above 4.4 °C or when the conditions of the protected fluid will prevent freezing. Snow- and ice-melting systems shall include automatic controls capable of shutting off the systems when the pavement temperature is above 100° and no precipitation is falling and an automatic or manual control that will allow shutoff when the outdoor temperature is above 4.4°C so that the potential for snow or ice accumulation is negligible.

For projects interested in complying with MFHR as well as heating garages for matters of safety, the performance path of the MFHR program should be followed with the baseline model guidance noted above.

Sincerely,

Enterprise Green Communities Certification Team