May 29, 2007

Richard Karney, PE ENERGY STAR Product Manager U.S. Department of Energy 1000 Independence Avenue Washington, DC

Dear Mr. Karney and Mr. Butzbaugh,

On Behalf of Rinnai America Corporation, I would like to offer the following comments regarding the Energy Star Draft Criteria for Residential Water Heaters.

Rinnai supports the initiative to develop and implement an Energy Star rating for residential water heaters.

## **Conventional Gas and Electric Storage Water Heaters**;

Rinnai agrees with the DOE proposal that gas and electric storage water heaters should not be given consideration for an Energy Star rating.

## **Whole – Home Tankless Water Heaters:**

Rinnai agrees that whole—home tankless water heaters should qualify for an Energy Star rating if the Energy Factor is at least .80.

Rinnai does not agree with the DOE proposal that places a minimum "gallons per minute" requirement on the tankless water heater of 3.5 GPM at a 77 degree rise. Rinnai manufactures or will be manufacturing whole-home tankless water heaters that would qualify for the Energy Star rating if the minimum gpm was reduced to 2.5 gpm at a 77 degree rise.

Rinnai does not agree with DOE on the issue of maintenance based on hard water. Hard water implications can be addressed either by conventional water softening or some newer technology utilizing electronic water treatment. Rinnai has tested one such electronic device with excellent results. Moreover, tank-type water heaters also suffer from the effects of hard water. Energy transfer is reduced which reduces efficiency and, build-up overtime compromises the water heater's ability to perform as when newly installed.

## **Advanced Non-Condensing Gas Storage Water Heaters**;

Rinnai agrees that Advanced Non-Condensing Gas Storage Water Heaters should qualify for an Energy Star rating if the Energy Factor is at least .70.

## Warranties;

If a warranty period is included in the criteria for determining if a product qualifies for an Energy Star Rating, it is Rinnai's desire to have an equal playing field for all products by imposing a uniform warranty period for all products.

Thank you for consideration of our comments.

Timothy J Shellenberger Vice President – Research and Development Engineering Rinnai America Corporation