November 8, 2007

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

Hello Richard,

My name is Matthew Salkeld. I am a distributor for Nyletherm heat pump water heaters in British Columbia, Canada as well as an energy engineer and consultant.

I notice the proposed criteria for Energy Star heat pump water heaters only states drop-in or integrated type of systems. I would like the stand-beside type Nyletherm system to be included in Energy Star labeling.

Air source heat pumps are popular in coastal British Columbia for space heating.

The Nyletherm system we are finding is very versatile allowing the installation to be customized to use either indoor or outdoor air. Nyletherm fabricates compatible duct adapter that allow the use of ducting when necessary. We are now also installing units in unconditioned crawl spaces (typically 3' to 4' tall), which are very common here. These crawl spaces never freeze due to the warm ground below, warm house above and contained environment. Further, the uninsulated walls and ground of the crawl space behave as an earth energy heat exchanger, which warms the air in the crawl space thereby improving the efficiency of the heat pump water heater.

The integrated type of HPWH would likely not be practical for our situation and climate since we generally don't need dehumidification or cooling and don't have the unconditioned basements tall enough for a hot water tank that are found in the U.S. There would generally be no net energy benefit by placing the unit indoors since it would simply rob heat produced by the furnace. Plus the integrated tank would be at risk of freezing if placed outdoors to use outdoor air.

The Nyletherm pricing is very reasonable and competitive with tankless gas water heaters in our market. We are able to pique the interest of many HVAC contractors and builders who are already very comfortable and experienced using air source heat pumps.

As you may know, the Canadian government and provinces are paying grants to homeowners for energy star heating equipment and appliances. I believe that Energy Star labeling for the Nyle unit would be of great benefit to the market. I am in contact with Brian Killins, P. Eng. who is the senior standards engineer for Natural Resources Canada. He is conducting analysis now to help support the technology.

Regards,

Matthew Salkeld

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Matthew Salkeld, P.Eng. Certified Energy Advisor

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