

Comments from Garry Bedard, Lennox, sent via Steve Saunders, TexEnergy Solutions, Inc.

Comments regarding the 14 SEER Heat Pump:

Our concern can properly be understood by looking at this almost mathematically. Each requirement is a "constraint." For example, the design must be above 14 SEER. Design must be above 12 EER, and the design must be above 8.5 HSPF. There are designs that meet all three constraints – designs that we have out there today. And, I think we have design solutions from 2 to 5 tons that meet the specification. However, as a practical matter, the 8.5 HSPF means that you'll probably be giving somebody a 14.5 or perhaps 15 SEER heat pump in 4 and 5 tons. The 8.5 HSPF is the "limiting constraint" in the larger tonnages. We will specifically add cost to achieve that target. Normally, a manufacturer doesn't target HSPF. As you said, at the higher SEERs, SEER and HSPF can fight each other. We would design for SEER and get what we get in HSPF. Typically, that would be something above 8.0; sometimes (in the lower tonnages) as high as 8.5.

Said another way, there are lots of lower cost 14 SEER heat pump solutions that might be only at 8.1 or 8.2 HSPF. Yet, the standard throws those out in favor of a much, much more expensive unit. Perhaps that is the intent of the EPA - they like to position this as challenging the industry. Well, we would have a counter argument. What is the marginal benefit of moving from a standard of 14.0 SEER/8.0 HSPF to one of 14.0 SEER/8.5 HSPF? Unlike SEER, HSPF is not the whole story. Remember that heat pumps have back up heat that uses far more energy at a far lower efficiency than the HSPF would ever accomplish. If the standard were lowered, manufacturers wouldn't go back and redesign the lower tonnages to get lower HSPFs - they'd keep them where they are. What you'd do is increase the population of available Energy Star products with really decreasing the overall HSPF. (What good is it to have a 8.5 HSPF standard if almost no one buys one because it forces them to use two stage compressors and variable speed air handlers in 4 and 5 tons?) The fact is, there will be far fewer heat pumps sold at this higher standard, so you could argue that the higher efficiency target will actually deliver higher energy usage.