

May 22, 2019



RE: NEEA comments on ENERGYSTAR ASHP Eligibility Criteria draft 1 v6.0

Dear Abi,

Thank you for the opportunity to review and comment on the draft ENERGYSTAR program requirements product specification for Air Source Heat Pump and Central Air Conditioning Equipment. Giving the current limitations of SEER and HSPF and EER metrics, your proposed climate specific performance criteria are a step in the right direction. The following are my comments on your proposed revisions:

- Requiring an 80% capacity criteria is good for three reasons.
  1. It helps ensure the heat pump delivers warm air when it is cold out, thereby improving consumer comfort and satisfaction in the heat pump.
  2. It reduces risk of backup heat being required, thereby reducing peak power demands.
  3. It is simpler approach than requiring the installer to evaluate the capacity of the heat pump to ensure it works in the climate it is installed. While capacity sizing is the best practice, it is infrequently done and therefore the simple 80% capacity criteria is more likely to ensure a heat pump actually heats when it is cold out.
- Using national map to differentiate cold climates vs moderate and hot climates is easy to understand, but it is not good for the moderate NW marine climates of Oregon and Washington where 80% of the NW population lives. Homes in heating climates with relatively moderate design temperatures (10-20F) are better served by variable capacity heat pumps that have good turn down ratios. Many of the systems with 80% capacity at 5F have reduced seasonal performance mild climates because of short cycling. If the national map is used, the EPA should simply remove the 80% capacity at 5F criteria in climates with less than 5000 HDD.
- Requiring reporting of HSPF and capacity at 5F is a valuable role for EPA ENERGYSTAR. It enables designers to better chose which heat pump is appropriate for the local climate.
- The EPA should pursue use of better metrics than HSPF and SEER in the future. Please consider use of the Canadian Standards Association test procedure and rating (CSA EXP07) as it provides better climate specific product performance differentiation based on a dynamic loads-based test procedure using the equipment's native control algorithms.

If you have any questions, please do not hesitate to call me.

Best Regards,

**Christopher Dymond**  
SENIOR PRODUCT MANAGER  
Direct 503.688.5454

Northwest Energy Efficiency Alliance  
421 SW Sixth Avenue, Suite 600, Portland, OR 97204  
503.688.5400 | Fax 503.688.5447  
[neea.org](http://neea.org) | [info@neea.org](mailto:info@neea.org)