



December 15, 2011

Ms. Ann Bailey  
United States Environmental Protection Agency  
Office of Air and Radiation  
1200 Pennsylvania Ave NW  
Washington, DC 20460

**Subject: Follow up Comments to ENERGY STAR's Most Efficient: Proposed 2012 Recognition Criteria for refrigerators and clothes washers**

Dear Ms. Bailey,

On behalf of the Northwest Energy Efficiency Alliance (NEEA), we respectfully submit comments in regards to ENERGY STAR's Most Efficient 2012 criteria for refrigerators and clothes washers issued November 29, 2011.

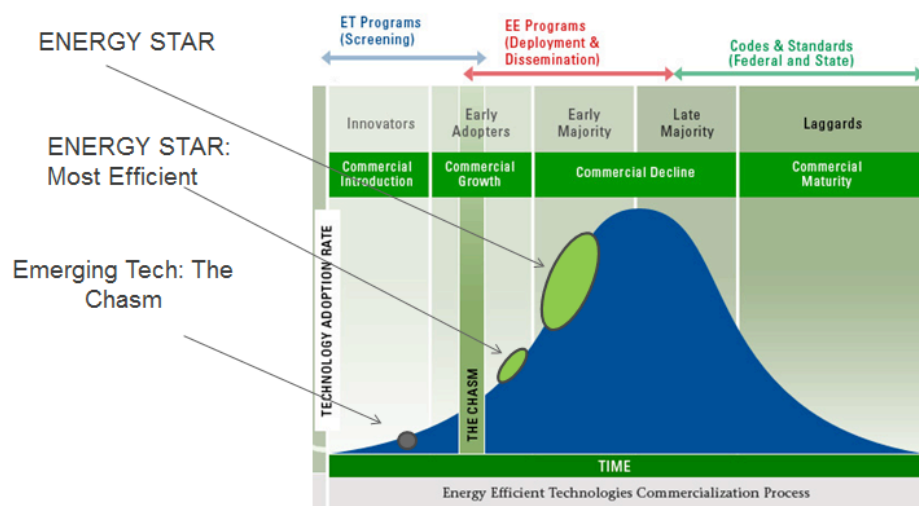
The Northwest Energy Efficiency Alliance (NEEA) is a non-profit organization working to maximize energy efficiency to meet our future energy needs. NEEA is supported by, and works in collaboration with, the Bonneville Power Administration, Energy Trust of Oregon and more than 100 Northwest utilities on behalf of more than 12 million energy consumers.

We commend the EPA for its work in updating ENERGY STAR's Most Efficient 2012 criteria for appliances, and specifically those specifications for clothes washers and refrigerator freezers. We appreciate this opportunity to provide the following comments and recommendations.

**1) We support the use of different levels for clothes washers based on volume, but encourage EPA to increase the minimum MEF for small washers.**

We concur with EPA that two levels based on volume of the clothes washer is important and necessary given that the difference in energy consumption between small and large washers is significant and given that they represent different generally mutually exclusive market segments. However, we are concerned that the specification for clothes washers smaller than 2.5 ft<sup>3</sup> is too lenient, since our analysis suggests that 45% (10 products) of qualified ENERGY STAR clothes washers in this size range would meet this minimum MEF. This leniency does not align with Most Efficient's goal to identify and recognize the top performing products on the market, as indicated by Figure 1 below.

**Figure 1. Most Efficient Products comprise a much smaller and higher performing segment of the market than ENERGY Star products.**



We recommend that EPA increase the minimum MEF to 2.4 for clothes washers with volumes less than 2.5 ft<sup>3</sup>, which would reduce the number of currently qualified ENERGY STAR products that would meet the Most Efficient Criteria to 5, or roughly 22% of ENERGY STAR products.

**2) We recommend that EPA streamline the registration process for Most Efficient for these products.**

EPA does not automatically qualify models for ‘Most Efficient’, and although the additional requirements for official recognition are minimal, it appears that only a limited number of manufacturers have taken this additional step to register their products as ‘Energy Star: Most Efficient’. According to our data analysis of currently qualified ENERGY Star appliances, approximately 57 third party certified refrigerator-freezers and 34 clothes washers could qualify under the 2012 Most Efficient Criteria. However, ENERGY Star’s recently released *Most Efficient Pilot Proposed 2012 Recognition Criteria* presentation from November 30<sup>th</sup> indicated that only 4 refrigerator-freezer models and 18 clothes washer models received Most Efficient recognition. We recommend that EPA utilize the existing ENERGY STAR qualified products lists to identify the subset of products that would qualify as Most Efficient based on the recognition criteria. Using this data, we recommend that EPA publish a separate ‘ENERGY STAR: Most Efficient’ qualifying product list on a monthly or quarterly basis.

**3) We recommend that separate maximum energy thresholds be established for each refrigerator product type, in lieu of establishing a maximum energy consumption ceiling that applies to all refrigerator product types.**

We applaud the intent of EPA to increase leniency on maximum annual energy consumption for larger refrigerator freezers to allow more of models to achieve Most Efficient status. However, we

recommend that separate maximum kWh caps be established for each refrigerator product type for the volume levels where there is currently a 482 kWh/year standard cap.

For example, the four graphs below (Figure 2) show the changes in criteria for maximum annual energy consumption for 2011 and 2012 Most Efficient criteria, respectively, for 4 types of refrigerator-freezer models: (1) Side Freezers without through the door ice (TDI), (2) Bottom Freezers with TDI (3) Side Freezers with TDI, and (4) Top Freezers with TDI. As you can see, the 2012 maximum annual energy consumption ceiling (y-axis) was raised significantly for the models of these types with larger adjusted volumes (x-axis). The update to the 2012 specifications is an overall increase from the 422 kWh/year to 482 kWh/year for the larger volumes for each product type. Instead of bumping the maximum annual energy consumption level (kWh/year) for every product type for larger volumes up to 482 kWh/year, we propose EPA make an increase on a product-type basis.

**Figure 2. Comparison of 2012 & 2011 Most Efficient Criteria and their effect on maximum annual energy consumption specifications by volume for 4 different refrigerator-freezer types.**



For instance, for Side Freezers with TDI, which represent roughly 25% of the refrigerator market, EPA should consider establishing the new maximum threshold at 473 kWh/year as opposed to 481 kWh/year since 3 of 8 third party certified ENERGY STAR side refrigerator-freezers would meet Most Efficient. Ultimately, ENERGY STAR should encourage manufacturer innovation in this large market by setting the bar equally high for each of these refrigerator-freezer types. To ensure that

'Most Efficient' represents only the top models available, we recommend that EPA revisit the maximum energy consumption cap on a product-type basis for refrigerators.

We appreciate your consideration of these comments and look forward to ongoing collaboration.

Sincerely,

A handwritten signature in black ink, reading "Stephanie Fleming". The script is cursive and fluid, with the first name "Stephanie" written in a larger, more prominent hand than the last name "Fleming".

Stephanie Fleming  
*Senior Manager, Residential Sector*  
*Northwest Energy Efficiency Alliance*