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NRDC Comments on EPA's March 16, 2011 High Efficiency Proposal

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On behalf of the Natural Resources Defense Council (NRDC) and its more than 1.3 million members and e-activists we respectfully submit our comments on the EPA ENERGY STAR's March 16, 2011 proposal for a pilot of its new Most Efficient label. NRDC is very supportive of the addition of the Most Efficient component to the ENERGY STAR program and the direction that the EPA is taking. Our comments below consist of two parts: a) cross cutting issues on the Most Efficient program and the process/criteria for setting specifications and b) specific feedback on the stringency of the proposed requirements for the initial 7 product categories.

Cross Cutting Comments

1. NRDC Strongly Supports the Addition of the Most Efficient Element to the ENERGY STAR Program

NRDC's has been a long standing supporter of the ENERGY STAR labeling program. The program helps consumers and businesses easily select efficient products, and has been extremely successful in increasing sales and market share of efficient products in a wide range of product categories. One of the deficiencies of the current program, however, is that for many product categories there may be a two-fold or greater difference in the energy use of similar products that meet the ENERGY STAR requirements and have the ENERGY STAR label on them. Most consumers are unaware of the difference in energy use between these two ENERGY STAR labeled models and manufacturers and retailers do not have a mechanism for easily identifying and promoting the truly most efficient models on the market.

The new Most Efficient specification and label successfully addresses this market shortcoming and provides a national mechanism for all stakeholders to identify the most efficient models on the market. Over time, consumers will increasingly understand and

look for the Most Efficient mark. This will increase the market share of those models which are out in front and pave the way towards increased efficiency and lower energy use for the whole product category over time.

2. NRDC Supports the EPA's Decision to Include the Year as Part of the Most Efficient Marking

In order for the Most Efficient brand to remain credible and relevant in the market, EPA may need to update the specifications annually for some product categories. If not executed properly these necessarily frequent updates could cause a lot of market confusion. The required inclusion of the year will help consumers confirm that they are really getting the most efficient models on the market and that it meets the most recent version of Most Efficient. The current label design explicitly states Most Efficient 2011. Including the date is the best way to address this issue and is very easy for all stakeholders to understand. This is a far superior approach to listing the version of the specification, such as Most Efficient Version 1 or Most Efficient Version 3. Consumers will have no idea what version is current and some product categories might have not been updated while other are on their third specification revision.

3. NRDC Encourages Consideration and Linkage to Other High Efficiency Specifications and Programs, Where Appropriate

There are a growing number of environmental specifications and labeling programs that exist. We encourage EPA to consider existing "super efficiency" specifications that may already be in place as it develops its Most Efficient specifications and to strive for the highest reasonable extent of harmonization. For example, the Consortium for Energy Efficiency publishes tiered specifications for appliances under its Super Efficient Home Appliance program. The Tiers typically are set based on significant additional energy savings, commercial availability of products that are expected to comply, and cost effectiveness from a program implementer perspective. Other notable programs that focus on super efficient products include TopTen USA which identifies the ten most efficient models within a product category (e.g. refrigerators, TVs). Other opportunities for harmonization include products where the federal government has set ambitious efficiency goals for new products and is offering tax incentives, such as the non-business energy property tax credit (26 USC 25C) which requires natural gas furnaces to have an AFUE of 95 or above to qualify.

NRDC encourages the EPA to review the various specifications that already exist and where appropriate to adopt an existing specification when it is sufficiently stringent and it meets the EPA's overall criteria. Establishing common specifications across multiple organizations and policies will help build demand for qualifying models and make it more appealing to manufacturers to actively participate in the Most Efficient program. EPA should only adopt a new specification when it offers significantly greater energy savings than the highest existing specification.

4. NRDC Supports EPA's Proposal to Require Greater Efficiency for the Models with the Highest Energy Use

We agree with the directional decision by EPA to require the models with the highest energy use (as a result of offering the highest level of energy services) to have greater efficiency. In other words, for a product to qualify under ENERGY STAR or the Most Efficient program, the largest/fullest-featured models will need to be more efficient than smaller models or those with fewer features. The best example of this is the previous situation where a 4500 square foot McMansion home was receiving the ENERGY STAR label even though it consumed two or three times more energy than smaller homes and included no additional efficiency measures compared to these homes.

We believe further analysis and discussion is warranted on the topic of whether to set a hard cap (e.g. no model may use more than X kWh/yr) or whether a better approach may be to increase the stringency of a specification for those models above a certain threshold (X Watts, or Y kWh/yr, etc.). The latter can be achieved by altering the slope of a specification and making it more stringent for that market segment and if designed properly would yield almost the same level of overall savings as a hard cap.

Product Category Specific Comments

1. *NRDC is Supportive of the EPA's Proposed Most Efficient Criteria for TVs*

We are unaware of any specification that is more stringent than proposed ENERGY STAR Most Efficient criteria. The EPA's proposal is an aggressive one and we support it. Today, roughly 3 percent of all ENERGY STAR qualified models already meet the Most Efficient 2011 requirements. We expect many additional models to be introduced to the market in the next few months as many of the newer and most efficient models are introduced to the market this spring and become certified by ENERGY STAR. Some of these will also meet the proposed Most Efficient 2011 requirements.

The TV industry has repeatedly shown the ability to achieve rapid and significant efficiency improvements each year. For example, when ENERGY STAR version 4.0 was established approximately 25 percent of the market met the criteria. Today over 75 percent of the market meets the criteria roughly one year after their effective date. We have also seen a huge increase in the number of models that meet ENERGY STAR version 5, including models in excess of 50 inches which industry stakeholders said would be extremely difficult to achieve.

2. *NRDC Recommends Aligning the Most Efficient Criteria for Furnaces with the Federal Tax Credit Levels*

As discussed in our cross cutting comments, Section 25C of the federal tax code offers tax credits to consumers who replace their furnace with one that has an AFUE of 95 or above. NRDC encourages EPA to modify the required AFUE to 95 instead of 98 and to

evaluate a requirement for the use of 2 speed motors and/or the use of modulating burners. The incremental savings between an AFUE of 95 and 98 are not very large. For example, a pre-1940's home in Anchorage, AK would save 48 additional therms or $64 dollars a years with an AFUE 98 model instead of an AFUE 95, while the same vintage home in Bakersfield, CA would only save 10 therms or $13.[1] Only 11 models would qualify for the current proposed Most Efficient criteria, or approximately 2 percent of ENERGY STAR qualified models, and these models are only made by 2 manufacturers.[2] In contrast, 238 models have an AFUE of 95 or higher, which corresponds to approximately 40 percent of ENERGY STAR qualified models and many more manufacturers make models that qualify. NRDC believes that aligning the Most Efficient criteria with the existing tax credit specification will send a clear market signal and prove consumers with significant energy savings.

3. *NRDC Supports EPA's Proposal to Set the Most Efficient Criteria for Refrigerator-Freezers at 30 Percent Better than the Federal Standard*

NRDC supports the proposal to set the Most Efficient 2011 criteria for refrigerator-freezers at 30 percent better than the federal standard. This specification aligns with CEE's Tier 3 for refrigerator-freezers and also overlaps with many of the Top Ten USA medium and large refrigerator-freezer models. However, none of the Top Ten USA extra-large refrigerator-freezers would qualify as they all exceed the 403 kWh per year limitation. Per our prior comments, we recommend that ENERGY STAR revisit the proposed hard cap of 403 kWh per year on all refrigerators and instead establish an increasingly stringent specification for models that exceed a certain volume. For example, the larger models could be subject to a percentage better than the federal standard that is greater than 30 percent. Without this modification we are less likely to see the types of energy efficiency gains we are all seeking for the largest and biggest energy consuming models on the market.

4. *NRDC Recommends Modifying the Proposed Most Efficient Criteria for Clothes Washers*

The EPA proposes that the Most Efficient 2011 criteria for clothes washers be a minimum modified energy factor (MEF) of 3.0 and a maximum water factor (WF) of 3.0. There are ten models that currently meet these criteria which make up 3.5 percent of ENERGY STAR qualified products. For comparison, the CEE Tier 3 criteria are a minimum MEF of 2.4 and a maximum WF of 4.0. Six of the ten Top Ten USA large clothes washers would qualify for ENERGY STAR's proposed Most Efficient 2011, but none of the Top Ten USA small clothes washers would qualify despite the fact that their overall energy use is lower.[3]

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[1] Calculated using Energy Star Furnaces Savings Calculator, http://www.energystar.gov/index.cfm?fuseaction=find_a_product.showProductGroup&pgw_code=FU

[2] York International, Coleman, Fraser-Johnston and Luxaire are all subsidiaries of Johnson Controls, Inc.

[3] Top Ten USA only lists MEF, not WF.

Given the fact that so few models qualify for the proposed Most Efficient criteria and that no models under 3.8 cubic feet would qualify, NRDC recommends that ENERGY STAR modify the proposed Most Efficient to one of two options: 1) Set the Most Efficient criteria at CEE Tier 3 levels. At these levels, 152 models would qualify, which is approximately 53 percent of ENERGY STAR qualified models; or 2) Modify the proposed Most Efficient criteria for smaller clothes washers either by proposing a different MEF and WF for machines under a certain size or by setting a maximum annual energy and water usage that a machine could meet if it did not meet the MEF and WF specifications.

5. *NRDC Recommends Modifying the Proposed Most Efficient Criteria for Central Air Conditioners and Heat Pumps; NRDC Supports the Proposed Most Efficient Criteria for Geothermal Heat Pumps*

NRDC believes that the proposed criteria for central air conditioners and heat pumps are exceedingly stringent. For split systems, less than 0.1 percent of ENERGY STAR models would qualify for Most Efficient 2011 and there are only two manufacturers who make qualifying equipment. Additionally, the specification is limited to models smaller than 3 tons. NRDC suggests that EPA consider revising the specification for split systems to coincide with the CEE Tier 3 specification. This would allow 26 percent of ENERGY STAR qualified split ac and 58 percent of split heat pump models to qualify.

For packaged systems, 3 percent of ENERGY STAR qualified heat pumps would qualify and 1 percent of ENERGY STAR qualified air conditioners would qualify. Only one manufacturer makes a packaged ac that would qualify for Most Efficient, while four manufacturers make packaged heat pumps that would qualify. However, CEE does not have a Tier 3 for packaged products and CEE Tier 2 is quite similar to the current ENERGY STAR criteria (71 percent of packaged heat pumps and 83 percent of packaged ac would qualify). Therefore, NRDC recommends that ENERGY STAR set the Most Efficient criteria for packaged systems at the same level as for split systems. This is consistent with the approach that ENERGY STAR is proposing for refrigerators, in which differences in features or physical size are not reflected in differences in the energy performance spec.

NRDC supports the proposed Most Efficient 2011 Criteria for all types of geothermal heat pumps, which mirror the ENERGY STAR Tier 3 Criteria which take effect January 1, 2012. Given the inherent increased efficiency of these systems, it is logical that a large percentage of ENERGY STAR qualified models would be eligible for Most Efficient.