Thank you for the opportunity to comment on Draft 1, version 8.0 of the Energy Star specification for clothes washers. The comments below address issues in the order in which they are presented in the draft proposal.

**Scope: Combination All-in-One Washer-Dryers**
NRDC believes that it would be inappropriate at this time for combination all-in-one washer-dryers to be eligible for Energy Star certification, in light of the continued lack of a published test method for determining dry cycle water use, as well as the lack of publicly available data on dry cycle water use. When a test method and test results are available, their eligibility can be reconsidered. Additionally, with regard to products meeting the definition of a laundry center, NRDC continues to have concerns about the dryer energy test method.

**Qualification Criteria: Alignment with CEE Efficiency Criteria**
NRDC requests that EPA explain the importance of the small difference between the proposed Energy Star Draft 1 Version 8.0 Integrated Modified Energy Factor for residential front-loaders and the current Consortium for Energy Efficiency Tier 2 IMEF requirement for residential washers. The benefits of alignment of these criteria should be considered.

**Connected Criteria**
During the development of the Energy Star specification versions 7.0 and 7.1, EPA solicited comments on the inclusion of a five percent energy credit for connected clothes washers. The credit was to be given to products that were certified using a final Test Method for Residential Clothes Washers to Validate Demand Response. NRDC supported this credit in versions 7.0 and 7.1, with the caveat that it would be temporary and used to “jump-start” the market for connected clothes washers. To date, that test method has not been completed, and therefore no clothes washers have claimed the connected allowance.

EPA indicates in Draft 1, Version 8.0 that connected clothes washers continue to represent a very small portion (less than 2%) of the Energy Star certified products. This could be a chicken-or-the-egg type issue: because the test method is not complete, products cannot yet get the connected credit and manufacturers are not yet incentivized to add connectedness to their equipment. NRDC continues to
support this credit as a way to stimulate the market, but has concerns about establishing a lower threshold for clothes washer energy efficiency without the corresponding benefits that come from connected criteria.

Once the test method is completed, it is reasonable to expect that the number of connected appliances could grow quickly. Given the increased ease of connecting appliances, more manufacturers could add connected criteria to their machines to offset some of the increase in efficiency stringency specified in Version 8.0. A rapid increase in clothes washers getting the connected allowance would undercut the efficiency gains proposed in Version 8.0, at least in the short term, as shown in Table 1 below.

Table 1: Integrated Modified Energy Factor Comparison

<table>
<thead>
<tr>
<th></th>
<th>IME$\text{F}_{\text{BASE}}$ Final Version 7.1</th>
<th>IME$\text{F}_{\text{BASE}}$ Draft 1 Version 8.0</th>
<th>IME$\text{F}_{\text{MIN}}$ Draft 1 Version 8.0, with Connected Allowance of 5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Front-</td>
<td>2.38</td>
<td>2.76</td>
<td>2.62</td>
</tr>
<tr>
<td>Loading (&gt;2.5 cu-ft)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential Top-</td>
<td>2.06</td>
<td>2.30</td>
<td>2.19</td>
</tr>
<tr>
<td>Loading (&gt;2.5 cu-ft)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential &lt;2.5 cu-ft</td>
<td>2.07</td>
<td>2.07</td>
<td>1.97</td>
</tr>
</tbody>
</table>

The energy and demand-response-related benefits of connected clothes washers are still somewhat uncertain at this point in time. NRDC believes the purpose of the Energy Star program should be, first and foremost, to save energy for consumers. NRDC suggests EPA consider a market penetration threshold for the connected allowance. Once a certain set percent of the clothes washers on the market meet the connected criteria, the allowance should be discontinued. This would incentivize manufacturers to bring more connected products to market, but would ensure that the credit is temporary and is not used as a substitute for energy efficiency.

NRDC requests that EPA gather data about how the connected capability of products is being used by consumers, perhaps by requiring that such data be reported by manufacturers receiving the connected allowance. This data will help shed light onto the usage and usefulness of the connected criteria, which in turn will help efficiency advocates, utility programs, and others to better understand the potential of these products.
Test Requirements: Cleanability
NRDC notes that DOE and EPA have restated their intention to develop a cleanability test. We continue to support the development of minimum cleanability and rinse performance criteria and the inclusion of a reporting requirement for the results of these tests. As stated previously, NRDC strongly supports the development of a cleanability test to ensure that all new Energy Star products continue to offer high performance of their essential functions. We continue to urge EPA to make the requirement applicable to all models regardless of certification date to avoid the possibility of gaming through early certification. Allowing manufacturers to avoid this reporting requirement through earlier certification would put other manufacturers at a disadvantage and could obscure poorly performance of machines carrying the Energy Star label. Consumers will be reassured by public access to this data for all Energy Star labeled washing machines, and NRDC urges EPA to require reporting of cleanability test results for all certified washing machines once the test procedure is finalized.

Effective Date: While we recognize the commercial and administrative benefits of adopting an effective date that is coincident with the effective date of a new DOE minimum standard, we believe that greater clarity on clean and rinse performance should be established by the time Version 8.0 takes effect. We urge EPA to consider the possibility of moving the effective date from January 1 to a later date in 2018 if needed to allow for industry and other stakeholders to understand and evaluate the clean and rinse performance metrics that will be applied to clothes washers marketed under the Version 8.0 specification.

Sincerely,

Edward Osann                Lauren Urbanek
Senior Policy Analyst        Senior Energy Policy Advocate