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Ms. Brenda Edwards-Jones U.S. Department of Energy, Building Technologies Program Mailstop EE-2J, Room 1J-018 1000 Independence Avenue, SW. Washington, DC 20585-0121

NRDC's Comments on California's Residential Clothes Washer Preemption Exemption Petition, Docket Number EE-RM-PET-100

On behalf of the Natural Resources Defense Council (NRDC), a national environmental advocacy group dedicated to protecting public health and the environment, and its more than 600,000 members, we express our unconditional support for the residential clothes washer waiver application that was submitted by the California Energy Commission (CEC). NRDC scientists have worked on national and state appliance standards for more than 25 years. We were active participants in the CEC proceeding that led to the adoption of a state standard for residential clothes washers that included water factor levels as a means to further reduce washer energy and water usage. We urge the Department of Energy to approve this waiver and allow timely implementation of the California standard.

NRDC supports this standard as it provides dramatic energy (electricity and natural gas) and water savings, and environmental benefits to the citizens of California. The California standard is necessary because the federal standard does NOT directly address water use in clothes washers. As such, a washer that meets the energy efficiency requirements in the current federal standard can use much more water than necessary.

Addressing the water use of clothes washers is critical because of the significant water savings potential, and also the two components of incremental energy savings that will be achieved in the form of: a) site energy savings to the consumer, and b) source energy savings that the water agencies will achieve due to the embedded energy of water use. While analysis of the energy savings potential of efficient clothes washers traditionally has focused on the reduced water heating needs, these analyses have not always accounted for the energy embedded in the water. Massive amounts of energy are required to pump water from its source to the treatment plant, to treat the water, pump it from the treatment plant to the consumers home, to the wastewater treatment plant and then to the point of discharge.

California's water systems are uniquely energy intensive due, in part, to the pumping requirements to move water from Northern California over the Tehachapi Mountains—

the highest lift of any water system in the world. The California Energy Commission has recently estimated that 19% of California's electricity use and 32% of the state's natural gas use is water-related. In fact, more than half of the projected electricity savings associated with the addition of the water factor requirement in California are due to the embedded energy savings.

Below we provide some additional information for your consideration as you review the CEC's petition:

Qualifying products already are on the market today – As of early 2004, 30% of the clothes washers sold in CA already comply with the 8.5 water factor requirement, and 20% already meet the 6.0 level. In addition, new qualifying products are being introduced to the market on a regular basis.

The standard saves consumers money - While the more efficient washers have a higher purchase cost, they are very cost effective for their owners, with paybacks of 6 years or less for a product that has a life span of 14 years. We also anticipate the incremental cost for the more efficient washers to drop considerably over the next several years due to increased production levels, and the paybacks to become even more attractive.

The standard provides California with dramatic economic and environmental benefits -The CEC estimates that upon complete turnover of the existing stock of washers the state will receive the following benefits from the 6.0 Water Factor standard:

- Water savings 67 billion gallons/yr
- Electricity savings 500 GWh/yr (Giga watt hours per year)
- Natural gas savings 50 million therms/yr
- Overall savings (including avoided water pumping and treatment costs) \$244 million/yr.

The water savings are especially compelling as they represent as much water as is annually consumed by the City of San Diego, our nation's seventh largest city.

In closing, we urge the DOE to approve California's waiver request and grant it the right to implement the state standard it has already adopted. This standard will be a great benefit to California's economy and environment.

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