

-----Original Message-----

**From:** Alexander Lee [mailto:alee@laundrylist.org]

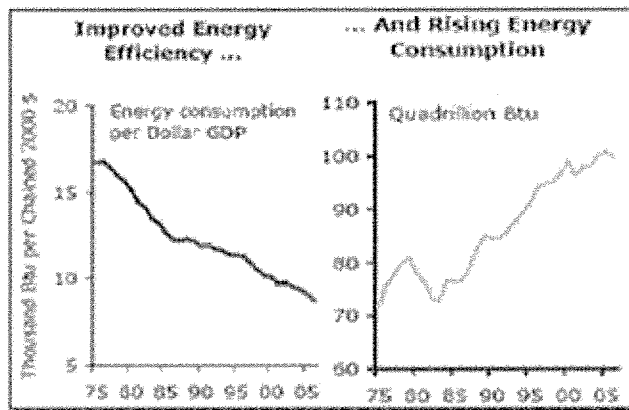
**Sent:** Thursday, February 11, 2010 9:26 AM

**To:** Executive Director,

**Cc:** Ruderman, Jack; joanne.morin@nh.gov

**Subject:** Comments and suggestions in response to NH PUC DE 10-024 (Order of Notice)

Dear Debora, Jack, et al.,



Source: EIA

Programs that aim at replacing residential gas or oil hot water systems with solar systems **do not reduce demand for hot water**; however, there are several instances in the residential, commercial, and industrial environment where hot water usage could be safely and reliably replaced with cold water to perform the same function, resulting in cost and energy savings. A solar hot water program that neglects to educate consumers about the benefits of cold water washing of clothes, for instance,

could be better designed to incorporate this valuable information.

Emissions of 0.5 MTC/annum could be avoided if Americans not currently washing in cold or warm water switched away from hot water. (See <http://www.pnas.org/content/106/44/18452/T1.expansion.html>) The average American family washes almost 400 loads of laundry each year and this accounts for about 10% of residential water use (indoor and outdoor). In Concord, NH (representative of other communities, I suspect) the wastewater and water utilities account for almost 18% of the city budget (<http://www.onconcord.com/Budget/concordv2.asp?siteindx=C30,07>). I am not sure how much water is consumed in the residential setting vs. C&I, but keep in mind the large amounts of C&I laundry done at coin-operated laundries and multihousing facilities, hospitals, restaurants, universities, schools, nursing homes, etc.

Apartment communities can save 330 percent more water, equating to a savings of 8,216 gallons of water per year per unit, by utilizing a common-area laundry room instead of an in-unit washing machine, according to the Multi-housing Laundry Association and a federal report. (See [http://www.laundrywise.com/downloads/Water\\_Energy%20Survey.pdf](http://www.laundrywise.com/downloads/Water_Energy%20Survey.pdf)) **The Commission ought to prioritize solar hot water rebates for landlords and associations with shared laundry areas. Since a) people who utilize such facilities tend to be in the most need of financial help and b) the people who own such facilities often have the disincentive portion of "split-incentive problem" to invest in conservation or efficiency, this would be good public policy.** It is Project Laundry List's position that doing your wash (not your drying!) at a coin-operated laundry is the greenest scenario.

Current programs at the federal and state level take insufficient notice of Jevon's Paradox (or rebound effect). Where possible, rebate programs and other state-administered programs should focus on eliminating or reducing demand for energy and/or natural resources, not just more efficient use of the resources...or we will continue on a collision course with ecological catastrophe. See chart included in-line. Imagine China with a billion washers and dryers.

+ + +

It is Project Laundry List's position that incentives for installation of cold-water wash technology at commercial and industrial laundry facilities --such as the ozone injection systems manufactured right here in New Hampshire-- should be a high priority for the Commission.

**As the Commission wishes to determine what additional renewable energy incentive programs for customer-sited generation projects for C & I customers should be offered, we ask that the ozone-injection system be classified as a thermal generation device.**

As you are well aware, "The American Recovery and Reinvestment Act of 2009, Public Law 111-5 (ARRA or Recovery Act), was enacted to preserve and create jobs and promote economic recovery, assist those most impacted by the recession, provide investments needed to increase economic efficiency by spurring technological advances in science and health, invest in transportation, environmental protection, and other infrastructure that will provide long-term economic benefits, stabilize State and local government budgets, in order to minimize and avoid reductions in essential services and counterproductive State and local tax increases. Recipients shall use grant funds in a manner that maximizes job creation and economic benefit." The biggest driver of local budgets outside of schools and public safety is water treatment and water utility. This technology reduces the amount of water needed for washing, while generating energy that diffuses through water to eliminate dirt and grime from fabrics.

A large amount of commercial laundry comes to New Hampshire's E&R Campus Service from campuses around the region. We would do well to encourage them to switch, as many county nursing facilities have already, to this common sense technology. They employ over 200 people. We could provide countless other examples of businesses (Concord Hospital, for instance) that would benefit from making this switch. (N.B. NH's home-grown Aquawing is the only clinically validated system guaranteed to kill over 99.999% of the superbugs MRSA (staph), C.diff and Aspergillus niger. The system also prevents HIV and all Hepatitis strains from surviving the wash process.)

Installation of such a technology can lead to as much as 35% or more in total water savings. Ozone activates the wash water allowing it to be more efficient and thereby using less total water. Facilities use less while enjoying the savings on their water and sewer bills. It can also reduce hot water usage as much as 85% or more. These systems allow users to wash in predominately cold water, which allows for drastic reduction in energy usage/bills. There are additional environmental and economic benefits, as well, making promotion of this technology--already in successful pilot at the Concord, Berlin, and Goffstown prisons--a winning proposition.

Thank you for taking these comments into consideration.

Walk in balance,

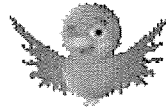
**Alexander P. Lee**

*Executive Director*

(603) 226-3098 (phone & fax)

(603) 219-3586 (cellular)

A Positive Approach to Change  
**PROJECT LAUNDRY LIST**  
27 Holly Street, Suite A • Concord, NH 03301  
[www.laundrylist.org](http://www.laundrylist.org)



“The ordinary acts we practice every day at home are of more importance to the soul than their simplicity might suggest.” -Thomas Moore, Irish poet\*

[The Circuit - Returns: The Clothesline Comeback](#) | Home Power Magazine (Feb/Mar 2010)

[Fighting for the Right to Dry](#) | Time (January 12)

[Letting it Hang Out](#) | Boston Globe (January 10, 2010)

[Letting It All Hang Out](#) | ABA Journal (January 1, 2010)

[A surprising sneak peek at the clothesline revolution](#) | Grist (Nov. 12, 2009)

[Re-Thinking Laundry in the 21st Century](#) | NY Times (Oct. 25, 2009)

\*There is some controversy as to whether this is from Thomas Moore or St. Thomas More, as previously attributed. Please help me solve the mystery.