IAN AYRES WILLIAM K. TOWNSEND PROFESSOR (203) 432-7101 (VOICE) (203) 432-4769 (FAX) <u>ian.ayres@yale.edu</u> www.ianayres.com

March 25, 2010

David Danner Executive Director and Secretary Washington Utilities and Transportation Commission 1300 S. Evergreen Pk. Dr. S.W. PO Box 47250 Olympia, WA 98504-7250

In re: UE-100382 and UG-100383

Dear Mr. Danner,

I am writing to you at the request of Michael Sachse, OPOWER's Senior Director of Government Affairs. He informs me that the Public Counsel for the utility commission argues that none of the OPOWER results have been independently evaluated, measured, or verified. He asked me to comment on that statement.

First, a word about my background. I am a lawyer and economist, and, since 1994, have been William K. Townsend Professor at Yale Law School and Professor at Yale's School of Management. I received my JD from Yale Law School and my PhD in Economics from MIT. I have published on a wide range of topics and have a particular expertise in behavioral economics. I do not have any financial relationship or any other sort of conflict of interest with OPOWER.

I have carried out an independent program evaluation of OPOWER's program with Puget Sound Energy in Washington State. Written in July 2009, the study evaluated ten months of Puget Sound Energy's OPOWER deployment. All differences between the control and treatment groups for pre-experiment usage, as expected, were statistically insignificant and close to 0%, meaning that the rapid decrease in energy use after program deployment indicates that the reductions in energy flow resulted from behavioral changes made as a result of OPOWER's program. The savings were both quantifiable and significant -- on average, households in the treatment group reduced kWh usage by 1.2%, therm usage by 1.2%, and a combined price-weighted usage by 1.1% compared to the control group. The study is being considered for publication and has already been cited by MIT Professor Hunt Allcott.

Please feel free to contact me if you have any questions on what I've written here.

Sincerely yours,

Ian Ayres