Abstract:
High energy using residential customers are often considered ripe in opportunity for energy savings. Since these customers use on average more energy than other customers, energy efficiency measures typically yield more savings. Moreover, high users can be easily identified and targeted for energy efficiency programs simply by using existing utility data. But what are the drivers behind their high energy usage? Do the expected savings come from primarily technical measures or are there behavioral components? Do these high users even suspect that they use disproportionately more than similar households? To better understand this market segment and ways in which programs can target them for increased customer engagement and savings, we characterized homes that are in the top decile of electricity or natural gas usage in four service territories of Minnesota. We visited 100 homes in which we conducted a walk-through audit of energy-using equipment and systems, performed a blower door test, and conducted an in-depth interview with the homeowner targeting their perception and attitudes towards energy. In this presentation, we focus on savings opportunities identified through both the audits and the interviews. We discuss common themes as well as anecdotes that depict the diversity and complexity of high using customers and ways utility program can best target them. We also discuss the project’s second phase which is a pilot program that applies the characterization results to inform program design; initial results from this pilot will be available in Fall 2015.