



Opening Statement
Oversight Hearing on Advanced Building Management and Control Systems
Chairman Lisa Murkowski
October 31, 2017

Good morning, everyone. The committee will come to order.

Happy Halloween to you all, I'm perhaps in a little more of the Halloween spirit – I like Halloween.

Last week we had an opportunity to look at a really scary subject, and that was cyber – cyber security, and the vulnerabilities of our nation's electric grid system. That's clearly going to come up a bit this morning and a challenge with which we have to contend. But, our primary focus in this morning is on what is coming down the pike with building technologies and advanced building management and control systems.

One hears terms like “smart” when it comes to appliances and buildings and cars all the time, but we really have to ask the questions as to whether or not we understand the scope of what is possible when we are looking at a whole building.

Smart thermostats and other smart sensing, metering, and control technologies have already had a big impact already. No doubt those products are a major reason why new homes in the Country, according to DOE's Building Technology Office, use about 20 percent less energy for space heating than older homes. And why, by DOE's estimate, today's American households are paying roughly \$216 less per year than if we did not have energy efficient equipment and appliance standards. Now, these numbers are dramatically different in my home state of Alaska, where energy costs are exorbitantly high, and some of our rural communities live dangerously close to, or are already in, energy insecurity. Some Alaskan families pay thousands of dollars a month – up to half of their household budgets, on energy alone.

The challenges in rural Alaska are unique, and that is certainly true when it comes to optimizing the way a building uses energy. That is partly because the puzzle pieces up north are more than simple math, more than just looking at the bottom line on energy bills. Much of the housing in rural Alaska is effectively western style design that may work in Albuquerque or in Ohio, but just does not work in an Arctic environment. Mr. Grunau (“*grew-know*”) is my expert this morning, and I think members of the Committee here will enjoy, or certainly learn a lot from

what he has to impart with building energy use from the rural Alaska perspective - and I thank you for being here, Bruno.

On the whole, though, the efficiency opportunities our buildings offer are enormous. With around 125 million residential buildings and more than 5 million commercial buildings consuming nearly 75 percent of all the electricity used in the U.S. every year, the volume is obvious. And I expect we will hear much more about the sleeping giant those buildings represent as an untapped energy efficiency resource. Because most of them do not have any kind of energy management or control system, and most of them are nowhere near being optimized when it comes to energy use.

Another thing that we hear, another phrase we use around here a lot is “low hanging fruit.” And we may be in that position where we think we have plucked all of the low hanging fruit in terms of energy efficient water heaters and A/C units. But I think we will hear this morning, as we listen to today’s witnesses, that there may very well be some pretty ripe low hanging fruit that we have yet to go after, and that’s in and with our buildings. So, we’ll look forward to that this morning.

I thank each of the witnesses for being here, and before I introduce each of you I will turn to Senator Cantwell for her comments this morning.

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