Good afternoon and thanks for joining us I am Judy Simpson. Now we've all read or heard at least something about smart grid. Customers of the Vermont Electric Co OPs are already using super smart great technology and other major a lector utilities in the state are not far behind. But as with most new technology questions are being asked about smart. So this afternoon two of Vermont’s most knowledgeable and influential experts on smart grid have kindly agreed to be with us. I want to welcome Liz Miller the commissioner of the department of public service and Jim porter who is the director of the department's telecommunications division. Thanks to both of you and thanks for being with us today.

Liz.: Happy to be here.

Judy.: Before we get started on smart. I want you to help me explain the overall role of the department of public service.

Liz.: Sure the department of public service serves the public interest in all utility matters. Electricity telecommunications water and wastewater and we also have a public advocate role consumer advocate role so consumers can call into the department of public service when they have questions about utility issues. Finally we do planning at the department. Planning on telecommunications and energy and serve that function pursue it to statutory mandates.

Judy.: How is this different from the public service board?
Liz.: The board is the court the best way of thinking about it is the board is the body that decides utility cases. The department is a party in all matters before the board on behalf of the public interest.

Judy.: Jim as we move through today's program who we are going to be focusing on the role of implementing a smart grid in Vermont S so can you give us a brief overview of what smart grid is all about?

Jim.: Fundamentally what smart grid does is it brings our electricity distribution system into the digital age and it adds a communications component to it. Once it's deployed you actually will be able to the consumer will actually have information about how they're receiving their electricity and when they're receiving it and it the same time it gives the utility the ability to know how much electricity is being used and one of the simple things to me is outages. Today if you have an electricity outage you have to call the utility. That will no longer be necessary.

Judy.: As a matter of fact that's how you find out where the outage is is you find out where the calls are coming from canned you tried to track it down. This way with smart grid you can almost immediately?

Jim.: It will be immediate if there's an outage and the utility will know within seconds if there is an outage and can just start deploying a truck to see where the outrage is.

Judy.: Other than the outage I don't even think about what my appliances are doing for energy. Why is it important for consumers to know this?

Liz.: There's a couple of reasons first of all there's benefits that will happen immediately once smart meters are deployed in the state and then there are benefits that will happen in later years. Immediate benefits will include outage monitoring the gym talked about. In later years there are manufacturers developing appliances that can if consumers choose to communicate with their meter to help them learn more about their individual energy usage. When to run a dishwasher or a dryer. Even if consumers don't wish to use a client spaced controls like that a smart meter system will allow consumers to go on the website or have a home display that gives them an overall picture of their energy usage and you can make choices in your homes on an overall basis that can actually matter for your bill in terms of whether you're running appliances. Even if you don't know a specific load on a specific appliance you can say I'm going to do my wash it night because my utilities told me that I have a lower
rate and I and that can be really helpful and that will be a benefit in later years.

Judy.: You can really save money.

Liz.: Exactly that's the idea.

Judy.: So what's happened so far and what's happening now with smart grid in Vermont?

Liz.: As you mentioned before in the introduction Vermont Electric Co OP was one of the early adopters of smart grid technology and they have seen by the way are real improvement on their outage monitoring because of it.

Judy.: It's pretty rural.

Liz.: And for them to have the ability to know immediately when an outage occurs has been a big deal. They also have something called the watchers program were some of their customers have started this process that we talked about a second ago looking at their usage and saving money because of it. That occurred several years ago. Our other utilities look to adopt smart great as well but had some barriers of financial cost to put this in. The good news is Vermont applied for and received a large Federal grants as part of the American reinvestment and recovery act. $69,000,000 which helps to significantly defray the cost of rolling outsmart grid here in Vermont. Right now many of our utilities are going through a system to roll outsmart grid by the end of 2012. About 85% of Vermont will be covered once that's done and it's a really great because it's the largest statewide per capita the grant in the entire country. So Vermont can really get ahead of this be a leader and the other thing we're doing here is we are having our Electric Utilities work with telecommunications providers to develop the network that's necessary to communicate between the customer and the utility. In that way we are really using essentially dollars twice which is good news.

Judy.: So in regard too smart grid what's the role of the department of public service?

Liz.: We were one of the grant co-applicants so we were in it from the beginning with the utilities setting up how the rollout would work. Because we are consumer advocates and we represent the public interest in front of all proceedings we are ensuring that the utilities as they roll out the grant
program are hitting the milestones that they said they would and are putting the protections in place that are required for consumers.

Judy.: How does the public get to weigh in with their questions and concerns.

Jim.: I think most recently the department identified that we've reached the point as the meters are actually meant to be deployed. We've heard some concerns about privacy and cyber security issues and we asked the public service board to hold a proceeding to address these issues. There was a public hearing that was held in September where members from the public from across a state come in and weigh in on those issues and then of public service board is scheduled a workshop that will be in Montpelier on November 1. That will be another forum where anyone can come in and express their opinions about smart grid before the public service board.

Judy.: What are some of the specific concerns you've heard so far?

Liz.: Certainly privacy is a concern and I think for consumers is really an unknown. Like any new technology think about our computers 15 years ago for example for our phones even 10 years ago. I think as communications increase I think consumers naturally have concerns about whether that privacy will be held or not. As smart leaders are rolled out it is important to make sure that the principles of privacy are well articulated. That the utilities are clear whether customers how the data will be maintained so that consumers can feel good about this new technology and the benefits they can bring without having to worry about that risk. Then another concerned that we've heard is why do I want this new meter? It is new infrastructure and some folks have a sense of why do I want it. There have been health concerns that had been raised so the department has looked at and said let's give consumers a choice. Something called opt out. We've been talking with the utilities about how to develop opt out programs so that consumers who just don't want a new meter can make that choice.

Judy.: So what are some of the benefits of smart grid in Vermont? I know we talked about outage locations and that kind of thing but what you see down the road?

Liz.: Given how rural are stays if you I think it can't be overstated you how important it will be to have this new technology to manage the costs after storms and other outage reasons. It's not just that the smart grid technology isn't just to the home level it's also throughout the whole distribution network so that when you have small solar panel installations or other renewable
installations in a community is home to smart grid will allow better load balancing as they call it. Which will help Vermont as a whole lower our peak energy usage especially in the summer months and that will help keep costs down because peak time is when energy costs the most. There are some benefits too smart grade which are separate and apart from that direct consumer home benefits we talked about earlier.

Judy.: From a utility standpoint I think it would make a lot more sense because you don't have to send trucks out as often as far as meter reading or even other issues that companies are faced with now.

Liz.: Right. That's true there's infrastructure costs that are saved.

Judy.: What are some of the concerns other then privacy that people have been concerned about? You mentioned earlier radiation?

Liz.: Yes a health concern that's been raised is radio frequency. Some folks have raised it's a similar concern if you have a Wireless Network in your home. Of course the mirror is on the outside of the home. What we've done or not health experts at the department of public service we've asked the department of health to review that. It's been reviewed in other states that have looked at smarter grid. It's important to have that review but in my view it's also important regardless of that to give consumers a choice. Because like many things in life there may continue to be disagreement on whether or not this is something a technology that folks want. I'm thinking back to the seventies with microwave ovens for example. Yet I have one in my home you probably do Jim probably does. So their choices that we made.. I view in a similar way let's have a review and let's give consumers a choice. I think the benefits far outweigh the risks I think that the technology is right for Vermont I think it will bring significant savings and the long run but that doesn't mean we shouldn't have this review.

Judy.: Let's talk a little bit about how opt out would work. Jan can you just call your company and say I pass.

Jim.: Sure to let you know Central Vermont public service CVPS that has actually filed a tariff with a public service board that provides for opt out. This has been approved and green mountain power has a similar filing that spending. But functionally absolutely you call the utility and say I would prefer not to have this need are and then point of fact utilities are actually sending out material so the customer saying if you don't want one let us know.
Liz.: I should also add that every utility is a little bit different in terms of their service territory and the exact technology they're deploying. From my point of view and the department’s point of view what we're looking for is consumer choice and that will differ by utility. Some utilities may have what I think of as a more functional opt out where they can call the utility and say you can put that meter on my house but I don't want to do x I don't want to talk to you every 15 minutes.

Judy.: More of a menu choice.

Liz.: Yes if that's an option a utility wants to take that's something we're very happy to review and work with them to make sure it provides the protection to the consumers that we're looking for.

Judy.: Can smart grid be as effective if you have people who are opting out?

Liz.: You do have to take a look at how the Network Works as a whole and we're keeping an eye on that but the answer is yes you can have opted out and a functional system that still brings benefits to consumers.

Judy.: Has Vermont Electric Co OP had any issues or technology that has caused problems in their service territory?

Jim.: Everything we hear and as you mentioned earlier they are the first utility that has implemented smart grid it's been a huge benefit to their consumers and two VEC. You mentioned there very rural utility and it's been very positive. They are also currently engaged in a consumer behavior study with I think around three or 4000 of their customers and are still trying to obtain data from the consumers but it's been very positive.

Judy.: For other utilities what's the timeline for the project?

Liz.: CVPS is the leading edge of the next wave and will start deploying years later this year. GMP is not far behind and of the utilities are working on their plans for Washington Electric Co OP Burlington electric department and others. We will see any year and 1/2 or so a real change as the utilities roll this program out.

Judy.: As far as how it affects a consumer does that mean the old meters physically come off your house and new meters are installed?
Liz.: Yes that's correct. Then we will be looking beyond that after the meter installation happens at rates because right now most of us have a single rate for our electric usage. Some utilities have already developed what are called time of use rates but mostly we are all on uniform rates. With smart grid we can start to look at when we get the data back from VEC and others that are looking at it right now we can start to see what's actually a benefit to the consumer what sort of choices can we be creating an error rate structure that will help save money in the long run.

Judy.: So there could be a time when consumers can say I can shave some money off my bill if I change some of the habits that I have.

Jim.: Absolutely and in the instance of CVPS they've already had their first time of use rate approved. The consumers will be able to they owe themselves of a soon as these meters are put in place. That's a benefit we will see almost immediately with CVPS when as Liz said people can start saying it would be less expensive for me to run my washer and dryer at 6:00 PM rather than at noon.

Judy.: Where should Vermonters go or what should they do to learn more?

Liz.: There's a number of places. Each of the utilities is rolling out and education and outreach program making sure that they have information available to their customers. One easy place to go is right to your utility for customer information that then be on that the department of public service our consumer affairs division would be very happy to provide information.

Judy.: Okay if you need more information about smart grid you can go two public service.Vermont.gov you can also find the department's web site by going to the home page for the state of Vermont. Thank you both for being with me today.

Liz.: Thank you very much.

Jim.: Thank you.

Judy.: That's our program for today I'm Judy Simpson we will see you again next time on across the fence.

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