

Attachment 2a: Transcript of Public Comments on the Public Review Draft

Attachment 2a consists of a transcript of public comments on the 2009 Vermont Long-Range Transmission Plan – Public Review Draft. Comments of the Vermont System Planning Committee appear in Attachment 1. Comments of participants in the six public outreach meetings held around Vermont between April 27 and May 18, 2009, are presented in chronological order. These comments were transcribed from recordings made at the public meetings. The comments have been subject to minor edits to correct transcription errors and remove extraneous material.

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Rutland, April 22, 2009

Group 1

Question 1

Um, no concerns yet. My... getting back to the first one, sort of the analysis was something I wanted to learn more about tonight because transmission is something that's often times overlooked. Everyone gets the power generation piece. They go to turn on the light switch and just expect the lights go on, but it doesn't get there without the transmission piece. I didn't realize until today that there was 23—I think 23 was the right number of projects identified and half of which are sort of necessary now, as I just heard and the other half into the future. We were proponents of the Northwest Reliability Initiative.

We being the Chamber?

Yes. And REDC [Rutland Economic Development Corporation]. Which is—Jamie Stewart is actually here—he's the fellow sitting on the right-hand side of that table with a light blue shirt on. He wasn't here earlier, but I'm... we sit on each other's boards and I oftentimes represent public policy for REDC as well. So I did speak at most of the public hearings on the reliability Project. And until recently—I'm going to speak here locally for just a half a second because it's interesting—until recently people didn't get the outage piece or at the potential for outages and what that means, not only to your home as an individual, but what that can mean for downtime to our businesses, which wearing that hat, I represent significant costs there and something you can't sort of wait to happen to deal with.

Can you give some examples of how you saw that affect people or what happened?

Yeah. Very specifically locally, um, we had two storms basically. Now those were different than a brownout or whatever you want to call it, but nevertheless, people got the impact of what it was like when transmission was down and they had to live with no power for a long time. The companies did a fabulous job of getting everyone back on the grid in layman's terms.

I mean, a fabulous job. I love the method where it was figure out how we can get power to the biggest groups of people, you know, and get... attack those and work that way and it was an extremely effective method. But in the meantime people got a real feel for what it was like to not have access to power and to switch on their lights and they go... and all of a sudden, it became very real for people and I still think real for people today because it wasn't that long ago that we had both the storms within a year.

It was almost five days, wasn't it?

For the first one it was—for many people. I happened to get it within a day, but I had my mother and my father and my brother move in with us. For about five days while theirs got restored. And it was kind of fun, but you know, on the one hand... but on the other hand it was just... you got... part of the difficult part was not knowing when it would come back on. And it was winter and so you know, you have heat issues, you have... the only thing that worked for the winter part of it was we didn't have to worry about the refrigerator because I kept packing snow outside into the coolers and put all the perishables into the coolers so the winter work for the refrigerator piece but not for the heat piece. And I think at least for the citizenry, everyone realizes now how important that transmission is and why we have to keep investing in the infrastructure and we have to be doing plans like this to know what the stress is on the system and what the future demands are and what the age factor... the age factor that's impacting our potential liability. And also just the part people just really don't think probably too much about, but I have to, is the reliability for our businesses. Um, and I understand the demand side of management, too. So that needs to play a role. But at the same time, as a local person who develops business, we want to also to continue to put demand on the system, which is, you know, means more investment in the infrastructure, so, um, so as an organization and as a citizen, I'm interested in the continued development of the transmission infrastructure. And at the same time we're in... I see the front page has a picture of wind turbines and we're interested in wind particularly. I don't know as much about the potential for solar, but I think wind is at the forefront of people's minds right now partly because of recent projects—particularly the one Noble Environmental Power proposed project for Grandpa's Knob, which is now kind of on hold unfortunately because of Wall Street issues, but nevertheless I think a valid project and all of the other subsequent towers that were proposed to be built along the ridge line there. And now the latest one, which I wasn't able to go to a public hearing on recently, but this second company that now coming in proposing several different wind towers—I think that's a viable alternative for us to support and I know it's not base load power, but it's nevertheless, you know, diversifies the portfolio a little bit and so we're keeping an eye on those projects and being somewhat supportive in the early stages. And while it's not part of this process we are concerned about some of the bills in the Legislature right now. So that's kind of a maybe too much of a tangent for the talking stick.

Question 2

No that's...because the second question and you're leading into it if you haven't already—started—what information would you like to share that you think planners need to know about activities, policies, the influence, the projected electric demand and you started talking about the interest in wind in this area. No way of knowing if wind has been adequately considered, but I think it would be excellent for you to share what you do know is coming—or maybe nobody else knows about it—that would contribute to their effective planning.

Well, a couple of things. First of all, The Smart Grid was talked about tonight and those kind of things. I mean, I know locally people are excited about that concept.

The Smart Grid?

Right. And CVPS will be investing in and I want to be at the head of the line when it comes on for my home.

That's why told them, too!

Oh, absolutely!

I'll be a beta user!

Yeah. I think it's just the coolest thing and I think it makes sense when you have—the larger your family, the more it makes sense, which, mine is five. So we use a lot of electricity. Lots of laundry. Lots of dishes. Long showers, you know? The three of them are older kids now, but it doesn't make their laundry or their showers any shorter or...

Longer showers!

Longer showers, yeah! More laundry!

Yeah. Exactly. More dishes. Um, I think that's incredible and I can't wait for that. I really do want to be one of the first ones on-line with it. And I look forward to the day when even the appliances are controlled wirelessly by the Smart Grid. When my dishwasher will...well, I'll let it talk to each other and it will decide when to turn on for me to do the dishes. I'm still trying to figure out a way because I know I'm going to have to unload the dishwasher. I haven't figured that out, but it leaves, you know, if it started to save me money when it's running, that would be cool.

Maybe with the extra money you could buy a robot!

Somebody to unload it! Now you're talking!

That's the worst job in the world.

Load and put the dishes away for you.

And then the other piece is that right now there are a couple of bills moving through the Legislature and I don't know where people fall on them, but I am very concerned with House Bill 446, which is setting some rates for solar, methane and wind power, which are just too high in our opinion. And we don't think the Legislature should be in the business of setting rates and we think that the cost for the power mandating those costs are too high and I think it's going to get passed on to Vermonters. I think that people who can least afford it will be paying for it. And I think it sets a bad precedent overall, so we oppose the bill. We've made that very clear.

We—the Chamber?

The Chamber and REDC. Yeah. Rutland Economic Development Corporation. And I've written a couple of op-ed pieces to the Herald and the Free Press, neither of which have been printed yet, but the Free Press did contact me back today and they asked for more specific information about what town I live in, what my contact phone number is. They want to make sure I am who I say I am I guess. So that could be forthcoming. In the meantime we have sent a position statement up to the Statehouse representing our position at least because we think those are valid concerns with that Bill. We're in favor of renewable energy and renewable energy sources and pursuing those. We're just not in favor of setting those prices for those at this time. And the other that we have been on the record about is base load power and we do support Vermont Yankee's re-licensing and want to see the Legislature follow through on that decision, which probably won't be until next year at this point. But we would have liked to see them deal with it this year so the power companies can finish the negotiations with the power rates, which we know are going to go up, but we do believe that nuclear is still an important source of power for Vermont in addition to hydraulic and a mix of renewables.

For economic reasons?

Economic, as well as environmental in our opinion. So, um, we expect that to be dealt with next year, but we would have liked to see it be dealt with this year.

So what group is informing the “we.” How would you describe your constituency that is the “we”—who are they? Are they small business owners?

Well, by definition every—virtually every business in Vermont is small. But if you look at our... the makeup of our organization—when I say our “we”—it's very diverse. We had actually probably the most... I think probably we have the most diverse Chamber in the state. And I did that actually on purpose because I really wanted our Chamber to be not representing just an industry segment, but to be representing...

Nonprofits?

Yeah. Businesses and organizations throughout the county so when Rutland... so we kind of represent Rutland in its whole rather than just a segment of Rutland. So we have virtually... we have about 80 to 90 different types of businesses and organizations. We have about 80—600 altogether, but 80 or 90 of

those are groups and organizations that are throughout the county and then the other—tourism, of course, manufacturing, small business, our version of large business: GE, you know, as an example. And before I forget, I mean one of our ongoing concerns always is GE being viable here. They have global competition. They just happen to work out of [Rutland?], Vermont. They don't have any products sold here. There are some now. There is a company in the airport park that actually provides a coating to the blades before they get to the factory so we do have one additional manufacturer that is associated with GE here. But other than that there's no end user basically so we have to be concerned about their competitiveness basically as they develop their...as they put up...

So the cost of power must be significant?

Significant. Yup. And they are our largest... they are the second largest employer and manufacturing employer in Vermont next to IBM and the largest in Rutland County.

How many employees?

About 1,200. Um, with an average wage of... I'll be misquoted here...but it's somewhere around with wages and benefits—around \$45 an hour. I'm in the ballpark at least. And they are long-term jobs. People have been there [all] their lives, you know? If we were to lose those 1,200 because they decide it's no longer cost effective to do business here, Rutland County and then it would trickle throughout Vermont—which wouldn't be able to bounce back from that one. We bounced back from [Tamberands?] and Metro Group and some other ones that we've lost, which hasn't been fun. But we can manage—but we won't bounce back from losing GE here. So we have to be very concerned about their electrical needs as one example. The other is workforce and making sure that we have skilled labor for them. And they are a non-union shop and that makes them competitive here. But they are still setting records in production here—in Rutland—and they also were part of the GENx engine—the new 787 lightweight engine, which is being developed, which is more fuel-efficient and requires less maintenance and there's all these great reasons to try this new invention. They are making the blades and panes for the 787—the dreamliner. So we're very lucky.

Right down there in West Rutland?

Actually,—no—right across the street. Yeah. Exactly. Windcrest Road. Down the street actually—next traffic light and take a left.

I'm still new to the area.

And they've made—they put a \$30 million upgrade into that facility recently. A lot of it robotics. A lot of it computer controlled environment that is putting out the blades and panes. Because they do both commercial and military here. So when the military is off, they're building commercial and luckily, the contracts kind of balance themselves out somewhat so the workforce is pretty stable. But the electric is a huge issue.

Oh, of course. So um, in terms of public outreach for the plan, you are here both as a citizen and representing the Chamber?

...only. Yep.

Do you think there is something that VELCO could or should do to reach out to businesses to hear directly from them about the plan? Did you find that valuable? Would you find that valuable?

I think that would be. I do. I do find that valuable and what I would do honestly is I would probably look at some of the bigger users. Because I think that's... as I alluded to the importance of GE here for instance. I mean, that's a big user that transmission reliability is so significant.

I wonder if—with the fact that there is a planning process like this that does involve the public, um, where it is vetted in this way—would that be a selling point to businesses? Would the Chamber or other organizations like net benefit from being able to communicate to a business looking to locate here—look at how we're dealing with our infrastructure? I mean I don't know whether it's a sell—is there any value in this transmission planning process in order to attract businesses that will employ Vermonters and...

Um, you're half right okay.

Well no. I'm just asking a question. I have no idea of the answer. Remember—I am a lawyer. I am not a... I don't run a business. I don't run the grid. I just remove obstacles for them to do that so that really is genuinely a question.

Yeah. Because I think your answer was right in that I think there is a value there, but the value is for them knowing that the investment is being made in infrastructure so that they have that...

Not just that you're thinking about it... but they are actually going to think about it and do something about it?

Exactly. Yup. Yup. Because there are other parts in the country that maybe they don't have the reliability or as much of a guarantee for reliability as you can get. You know, there are certain things that are predictable here. I think that there are certain things that if you don't do you can predict you'll have problems with.

Right.

So having those investments I think is something that would help attract business here. It's a significant investment. I mean it's...

Is there are representative from GE that would want to speak to this plan or are you representing GE, do you think?

No. I would say because they have their own... they do their own thing. But I'll tell you what we had in this room... had the hearing for Vermont Yankee last year, the plant manager himself was here. That's how serious that issue is for them. And that's Dan Furman and he doesn't come out. You don't get the plant manager out of the plant much. Because they do what they do and they do it well.

And then they are there in the plant making sure that things are done.

Yeah. And they are leaders in the industry. Rutland, Vermont rocks here. It's unbelievable. We're very fortunate. And that's why the plant is still here and growing and investing in it. A \$30 million investment is serious.

Yup.

However, I mean, he was out and he was here. That meeting was important enough for him to attend in person.

Because he was concerned that without Vermont Yankee rates would become unmanageable?

Yeah. They are often times competing pennies on parts. Their main competition is like Rolls-Royce, Israel. They have, you know, some serious global competition and it could come down to pennies. I mean, electric rates are... right now it's an advantage for us being the lowest in New England is a selling tool for us right now. Um, but they use a lot of it. And I don't mean to overlook our tourism side either—Killington resort.

Yup.

They're I think running that gondola is about \$500 an hour. Yeah.

The one they didn't run this winter?

No?

Didn't they cease to operate one on the back side of the mountain five days out of the seven or something like that?

Hmmm... I don't know about that.

I thought that Skye...

Yeah...Skye Ship?

Skye Ship that goes down to 100?

I don't know. I didn't ride the Skye Ship but I was on K1 when that was running.

They've put a wind turbine on Jiminy Peak in western Massachusetts where I was working and now they have a ski area and now they are... they had grant money to do it or to help it. But they are not only covering all of their power—they are selling some back.

Are they really? Neat.

They already had structures on top of the mountain so...

And wind.

And wind. Which, by the way, I experienced for the first time personally when I hiked up to the top of Grandpa's Knob a couple of weeks ago and it's windy. I could see why that was chosen as the original wind tower back in 1940.

Grandpa's Knob? Yeah.

Yeah. It's windy.

I looked for... I can actually see Grandpa's Knob from my house.

Oh—do you really?

And I look forward to seeing a wind turbine up they are spinning around.

Yeah. Yeah.

And I think we have a view of a lot of the peaks around the Castleton area—you know, Poultney I think, isn't it? Somewhere all around there?

I'm not familiar with it.

No. I don't. And again I'm not my ??? It could be something. It could be Williamstown for all I know. But in the mountains all around near Castleton—whatever it's called.

Yeah. You can look up and know where they are. Yeah. They really are a windy out there. It's really kind of a neat.

Well, Ray from Proctor and my interest in coming here tonight was because I am beginning to get more inquiries from buyers... potential buyers of industrial and commercial properties for information on electric generation, the ability for them to generate power, hook into a grid or to... they want to know what their source of power can be and obviously what its price will be and their... you know, we have some of the lowest rates in New England, but if they're coming from Utah...

The ??? of the country.

Yeah. So...but anyway I don't know a lot about it and I've been learning a lot and I am impressed by VELCO's presentation and the care that you've taken to break it down for us laymen to understand and

breaking it into understandable complements and that's added immensely to my small knowledge on the subject.

What are the legal impediments for someone to get into the generation business themselves and connect to the grid? I mean we're talking about smart grid, were talking about people being able to meter both ways and yet that's in its infancy and...

Legal impediments -- there are hardly any. Those obstacles are easily knocked down. Money. Siting in terms of getting landowner, your neighbors buy-in. If you don't have either one of those things the legal problems are insurmountable. I mean you need to have the money available to not only build the facility, but pay the folks to do the planning, do the siting, understand the market rules, the ISO New England. If you're talking about something that is more than a net metered facility, I could talk about the legal stuff. He's probably better with these two guys on what it takes to actually make that interconnection happened because there is the whole lot of science involved.

And what a perspective generator of power who wants to connect to the great—would he be going through the Act 249 process?

248.

Act 248. Okay.

Well, it's not necessarily about connect. To build it you need a 248. To interconnect it you also need the 248 because you can't interconnect once it's built, but that's a whole set of other rules. You need to actually have an interconnection agreement with the transmission utility to connect to the grid. To provide the power I think you have to be a member of the ISO or a generator that provides power into the wholesale market. You have to understand those rules and there are plenty...

So it's daunting for an individual or even a small group of...

Not really. Not if you have... not if you have someone who knows how to... what a generation facility... what it is. How it works.

And it also depends on the size.

Yeah.

You're talking about a couple of hundred kW or 50 megawatts.

Exactly. Size does matter in this case.

If you go over 5 megawatts that's a big breaking point from New England stuff.

Is it?

That's right.

And if this legislation which I'm proposing passes, you'd be smart to build 2.2 or less I guess.

Right.

Because then you get a guaranteed rate. Right?

2.2 megawatts?

Kilowatts.

I was going to say...

No megawatts. I sorry. You'd be paid by the kilowatt but it's a megawatt and a total up to 50 right now in the legislation bill, but we think that can be changed to reach the 50 megawatt cap. The legislature might decide to make it a hundred next year.

But you could on a small...

Another minute or so...Is that okay? And then I'm going to call upon you to close us out, right, Leslie...

But, you might become that expert.

Oh yeah.

No. Seriously.

I doubt it.

Why not?

One of the things I like about my business being a business broker and a broker of commercial properties is that I learn a little bit about a lot of different businesses. So it makes life interesting, but I never become an expert in...

There's a niche here though, I'm saying.

But I think it's significant for this process that you brought up—that there's an interest in incoming industry to create its own source...

As long as you're asking, what's power costs in your state or your locale? They are saying what are the opportunities to co-generate and so people are getting educated enough that these possibilities are out there and it's likely to be a longer process than any of us...

What's the one you just mentioned? The J?

Jiminy Peak.

Jiminy Peak. Did you hear her say that?

No.

It's a ski resort in western Massachusetts and they put a wind turbine on the top and went from paying... seriously taxing electric rates or bills to not only covering all of their power needs, but they are selling some power back in the town. So it was a positive investment. One wind turbine.

One wind turbine.

Well they are up there. Who was it? Dean was saying in terms of wind power there is a big curve in elevation. The impact of elevation and what you can generate from wind power. Obviously, the higher you are, the better, but Jim Douglas doesn't want to see any windmills on our ridgelines, so...

He doesn't? I didn't know that.

Not a big scale. He is... he and I part company on that.

Right. Well, if we are wrapping up, do you have any other... what I observed and heard was that you are suggesting or you know, you're putting on the record that there's quite a bit of interest in generation by non-power companies and you were talking about um...

The importance of reliability...

And price to some critical industries in this area.

And that it's a matter of pennies.

And actually I say that it's also equally on a different playing field—equally important to Vermonters, both reliability and price.

Group 2

My name is Gerald. I came just to find out what was happening in the industry currently and I'll pass it on to the next person.

My name is Deena and I work for VELCO and I'm happy to have the chance to listen.

And I'm Jamie. I am the Director of the Regional Development Corporation and therefore, most concerned about the future of reliability, as well as cost of power, primarily for its impact on our manufacturing base because that's one of the critical components for our regional manufacturers.

I'm Peg and I came here—I think like Gerald—mostly to learn and educate myself to find the interrelationships of the transmission and generation and conservation and the changing mix of energy sources. I think they are pretty significant, but I have a lot of learning to do.

The first question is based on what you heard tonight what is your impression of the analysis and the draft plan? And what concerns do you have about the draft plans? Does anybody have any concerns or comments they want to make?

I got here late so I'm still catching up. I could go on some history of what I know is going on in issues with the...it is on. Right. Primarily I know that we've had a number of areas where there has been some weaknesses in the system which has created questions of reliability—not currently as much as into the future for a potential demand into the future, much of which has been dealt with I believe with the new line up going up in the western corridor. Um, but it's a continuing concern that will be there for me and I think that it's being well addressed. I do believe that there is a good plan in place to meet the needs into the future and my concern is that that continues in place because we have several key employers in the region where power is their second highest costs of doing business and all it would take would be a loss of reliability of that access to power to cause corporate decision-makers to find another place to do business. We are not... we don't provide a strong and competitive advantage to secure those businesses unless we have some of those base line things that we provide and as I said, because it is such a high component of the cost of doing business, power and the reliability of that power is absolutely critical to the continued success.

Q2: There is not a significant change right now happening in our demographics. There's not a significant change in our population base and those are the things that would be the first... there's not a big move for large-scale users to come into the area so I don't see in the immediate future a significant change. And the reality is that with what's happening with industry as a whole, um, industry is getting better at working more efficiently, more effectively and there's a good possibility that with some of the new technologies that they will actually reduce some of their demand needs. So I think it's going to be maintaining the system as much as anything will be critical. But I really don't see any significant change occurring in the near term.

Are you talking specifically about the Rutland area?

The county. The county. Yup. Within the county.

This is one that I hope goes away real fast. I heard something on the radio about use of landfills having declined because of the reduction in consumer activity. And so there is a reduction in trash and packaging trash. It occurred to me that we probably—I'd be curious to know this—if we'll be seeing some kind of a dip in demand for electricity also in connection with the economy, which is like I said, something I hope goes away. Because I hope you don't have to count that into your planning. But I would be kind of curious to see if we do see that.

That would be a long-term effect because there probably is a short-term effect from the economy, but long-term I would expect to see it. Yeah.

My short-term is a little shorter than your economists gave you the other day, so... we're going to see who's right. They were a year and a half late in announcing that we were in a recession so I figure they'll be a year and a half late in telling us that were out of it, too.

Any other projects happening that you're aware of that you think might happen? Any generation projects?

That you guys aren't part of? That VELCO or CVPS is not part of? I don't think there are any generation projects on the table that are independent projects. Like Middlebury has their damming the Otter Creek and...I'm sorry. That, you know, but I don't think we have any specific projects on the table in the county right now for a new generation sites other than what CVPS has been working on. So it...

Well, again, I'm sure this is not a big secret. The discussions about the wind generation in Tinmouth and Ira for example. But that's...

Who's doing that?

I don't know. It's not CVPS. It's another firm. But the point is I don't think it's... I think everybody's talking so I'm not real worried about that.

And do you think that that will have an impact one way or the other?

I'm thinking it could, but I'd be very surprised if by the time it reaches that practical point all the parties aren't playing together. I don't think it's somebody just waltzing in and doing this on a sort of a cowboy basis. My impression has been that it's a bigger firm.

We're talking about one megawatt I believe.

Oh, is that all? I thought it more...I thought it was pretty significant. It was an industrial scale at one point was the conversation, but at any rate, again, I don't see this as being something that isn't all...I think that it's.... like I said, it's not some... I don't see it as a cowboy project.

Well, with CVPS you have the solar project that's going forward. You know, that will obviously provide a new alternative source. Yeah. You're talking about those kind of alternative energy projects may cumulatively come up to 5% of the total generation needs. So none of those will have a significant impact. But it will help diversify the portfolio. But there is nothing that's prime generation project.

So everything is pretty much too small to basically to really have any impact on the plan?

None of it would be considered base load production.

Are there energy...are there any other energy subjects or projects that would be a possibility that might... you know, things that haven't been started yet or thought about yet that might... that you think might have some value that might impact?

There's—we have one that I've been working on for the last several years and trying to identify the right players to make it happen and we have a couple of areas where we have some clusters of industrial development where there's higher usage and I would love to see some cogen operations developing in concert with those businesses. We have an abundant supply of fuel for those with wood. With some of the scrap wood that's out there in our forests that's not really viable economically for harvesting for timber. But it would be making a healthier forest if some of that was cleaned out and a great use for that type of pulp wood or junk wood is in generation where there is both heat and electrical demand. And I think we have a couple of clusters—businesses that utilize both heat and high electrical loads and to the extent that we could find better programs for supporting that type of development—that I think would be a good thing both for the businesses involved as well as for the raw use and demands on the system.

What do you see as the barriers to that being real or that happening?

What I've seen primarily is that you have to create a fairly complicated structure—a corporate structure to manage that separate utility generation piece. And for companies to participate in that—it's rare that there would be a single company that would have high enough demand to really drive that. So you need to get a cluster of companies together to do it and then those cluster companies have to get into a collaborative business arrangement. So you've got to get people who are comfortable in making those types of long-term commitments with businesses that they have no direct control over. So that I think has been the single biggest issue. It's a complicated process and it demands a lot of faith between the partners to make it work.

And how do you see that that would impact the plan if you're talking about wood harvesting, is that... would that take away from the need to generate the electricity for heating, for innocence or the wood would replace that?

Well, what you would be doing is you'd be replacing carbon-based fuels with the wood fuel. Um, and as I say, where the systems are most efficient and most effective is if there is both a demand for heat in the manufacturing process, as well as the demand for electric use. So if you've got... one example at one point Vermont Tubbs is running with a cogen facility up there because they were using the heat from the boilers to run their dryers—for the wood dryers, as well as the power for the plant. It wasn't economical for them to do it for just a single unit. But if you could have multiple units of businesses that were buying into that, then you're really getting... it's not very efficient to use it just for power and just for heat. It is very efficient if you are using it for both pieces. So, but again, it takes either a utility coming in and making that type of investment and providing like a kind of a resource or getting the businesses to operate in concert together. In either case it's... there are some up front costs that are fairly steep.

I see you writing down, Peg. Do you have some comment?

Just some things that I want to talk to Jamie about afterwards. And of course, what that has done has raised questions.

Good. We like questions.

All right. See, when I hear suggestions like that I'm immediately thinking questions about, okay, how does that affect transmission planning? And I've heard net metering. I've heard a little bit about what that is and how do all of these pieces fit together? As you can see I'm really very low on the learning curve at this point. So I can't make too many comments, but it generates a lot more questions than it answers.

It seems like that's a good outcome, too.

Process feedback

Thank you. Well what I'd like to ask everybody is there anything this evening with the process that you might suggest we do differently? This again is the first evening that we've been doing this and so it's sort of a trial run and if there are any comments. As Heidi said, the food, the layout, the program, the length of the program—um, and maybe I'll just pass it around and everybody can get just one comment about what they thought about this evening. That would be great. And if you have more than one, then that's okay, too.

The food was great. Um, I found the posters very helpful. Some of the graphs and illustrations are included in the planning document but I'm the sort of person who would have loved to have copies of those posters in my own little hands to study intimately, as well as standing there and talking to somebody.

Would it have helped in the beginning to be directed to a website kind of thing?

I probably wouldn't have had time to do that. It is a good thought. Some people might be able to take advantage of it. I probably wouldn't have. Also there was a little slide—a paper with a bunch of slides on it and I guess I somehow thought we were going to be getting a presentation of some sort. I wasn't quite sure how that all fit together. The information is excellent. There was just a lot to absorb in a short time and your posters were very good and as I said, some of the graphs and things that were in the book—it would have been handy to have that sort of cross reference. I don't know what would have made that easier. But just actually having copies of the posters because they summarize the information very nicely.

I got here too late to make any criticisms so quite honestly I think it's all fine for me.

And what about the round table process? Did everybody find that this was an important component of the evening?

That's the only part I got here for so I thought it was great.

Okay. Thank you. We're good. Thank you. Thank you everybody. We really appreciate it.

Group 3

Question 1

Go ahead and raise your hand and I'll pass it to you. So, based on what you've heard tonight what is your impression of the analysis and draft plan and what concerns do you have about the draft plan?

Anybody?

I don't know enough yet to ask you a question.

I don't know ???

Did you want to speak?

Nah, I just wanted to say I don't know anything about it, so.

Well, I'll start. I'm Ray from Proctor and I'm impressed with the information that we've been presented covering a wide range of concerns—everything from environmental to an understanding of generation and transmission and how they interact and interface and came primarily because I have clients and customers who are beginning to look for facilities—industrial and commercial properties—that would tap into VELCO's transmission network. I haven't read the whole plan yet but the summary demonstrates that VELCO and the state are looking forward now 20 years for problems...identifying problems and then planning the solutions and they're looking for our input, so... I don't know enough about it yet to give them my input yet.

Um, I wish I'd had more time I guess. I couldn't make it around to all the kiosks. I guess that would be my first point. I just didn't have enough time to talk to everyone. I'm kind of interested, wondering how much new land is going to be cut to put in new transmission lines and to what extent they're going to use existing right-of-ways. That wasn't something that I was able to find out, but again I wasn't able to make it around all the kiosks. I guess that's the biggest question that I have come here that I'm hoping I'll be able to get answered later is what kind of new land is going to be cut, what kind of right-of-ways might they use and what's going to be new and what's going to be used ??? That's what I was thinking about.

Can I ask you a question, too? Because I have to leave.

Why don't we see if anybody else has something to say on question one, which is what is your impression of the analysis and draft plan? And I would say that includes what we've read because these kiosks were taken from the draft plan.

The only reason I don't know...

Yeah. And what concerns do you have about the draft plan? Steve, any comments on that question one?

Steven from Shrewsbury. I came with questions on the Coolidge Cold River Transmission Line and I had those questions answered that they're not going to add a third line. That they're going to upgrade a smaller line. They're not going to increase the right-of-way and I...

So you came with a very specific issue in mind?

Yes and who to talk to about their horrible cutting job they did on Town Hill Road and I have names to talk to and they're going to contact me so I've been very happy.

Good. Kim, do you want to...are you here as a listener?

I'm here as a listener.

Okay. Very good. Anybody have anything more they want to say about the analysis and draft plan and concerns or should we move on to...okay. We have plenty of time.

Ray from Proctor. I just want to say that many times you come to presentations like this and there is an awful lot of fluff and P.R. verbiage and there seems to be quite a bit of substance here to sink your teeth into and in fact, more than I can assimilate in a short period of time and the kiosks were very helpful and the ability to move around to different ones, spend more time at those that were of greater interest. So it's a great presentation.

Question 2

So now we move on to question two. What information would you like to share about local activities, planning or policies that may influence the projected electric demand? And they thought it would be helpful to give some examples. For example, plans for new local generation of energy—that kind of thing you are talking about with the vital mass. Energy efficiency and conservation efforts. Obstacles or barriers when trying to implement efficiency. Efficiency measures or install local energy generation. Or things that we might know about our community: economic or demographic changes that we see coming up. And remember, we are looking at a 20 year planning period here. So do you want to start out?

Hi. My name is Mike and I'm from Killington. I came here to let the planners know that I think... well, that's not my primary reason but I'll say it now, that I think there are communities in Vermont right now that are questing to have local generation. I went to a wind synopsis or whatever it was in Tinmouth a couple of weeks ago and it seemed to me everything was going along great until most of the people realized that most of the power generated wasn't going to be coming locally to them. I think many communities right now are at a point where they would like to see maybe their local generation being directly offset their local resources. I think that helps with the not-in-my-backyard scenario because they realize that there is a direct impact on their local community whereas it is something that's obtrusive and they're not getting that benefit...

So, it's a cost-benefit kind of thing?

Well, I think it makes them feel more comfortable about having an obtrusive thing rather than no one is going to there... I think there are other—and I know there are other ways to generate local power. I've worked with many different formats to do this, different technologies and I think local distributed generation is coming of age and I think there are unique places in Vermont which started 100 years ago on a local distributed generation type history with hydropower. I think we're at a... we've been through it before and I think with this new generation of distributed generation I think Vermont is a great place to experiment and at least lead the way on the nation on doing some of this stuff.

I don't know if I have an answer for that.

Yeah. Actually in 19...Ray Proctor. Um, in 1976 I moved from Rutland to Proctor and at that time and Proctor we were generating all of our power locally. The Vermont Marble Company generated the power at the Falls and we screamed bloody murder when they increased the local rates 50%.

At one time?

At one time. From \$8 dollars a month to \$12 a month and the rest of the state had been paying over \$20. So you know, it's all relative and yes, we were kind of proud being a self-contained town and you know, Proctor was one of those... has been one of those communities where an awful lot is done locally and the sense of community is very strong. And I think that the local power generation was a big part of that that we didn't think about too much. And now that...since Omya bought the Vermont Marble Power Company— you know, they sell to the grid now and we buy from the grid through them so our rates are comparable to the rest of the state. I would like to see if we added wind power on the ridges between us and the West Rutland or between us and Rutland that that power could—as much of it as possible—the state locally so I empathize with your thoughts there. But I don't know enough about how those contracts are negotiated and whether there's a requirement of the Public Service Board that any generated power go into the grid and you buy from the grid. But I'd be more interested in learning how locally generated power can stay local and serve the local people who are imposed upon with a view shed being taken up by wind power and have to put up with other infrastructure issues when putting it in.

I want to comment on that. Just because I know a couple of your answers. I do know with the group metering laws that have changed you can do a community net metering and it's within the realms of any old citizen and a group of citizens. It doesn't have to go through all of the jurisdiction that if you were going to generate power. I think the problem with wind right now is that anybody who wants to invest in it or any kind of power are looking at it from a commercial point of view and not from a...

Well, it has to be commercially viable.

That's the... any commercial person who wants to put money in it—yes, that's the way it is. But I think if you do it from a community point of view where you get five neighbors together or 10 neighbors or 100 neighbors and you want to put the system together and you are connected to each other, you become a group net meter, you can do that within the realms and offset your utility bill without having to become

a company and sell power back and I think that's the avenue I see. This micro generation or its small green generation facility being an advantage to the communities in Vermont because this is how they did it back 100 years ago with the Hydro. They had Hydro facilities go into place and everybody in that area told and to use that power when they needed to. And the laws won't allow us to do that right now, but in order to do that the community has come up with those resources on their own and that's why it ends up being a commercial entity that has to come in and run the wind farms rather than a local community thing. I, myself, am looking at a few of my neighbors. I was going to put a 10kW terminal on my property for my own benefit, but I thought maybe it's a little easier if I get 10 of my neighbors together and we put 100kW and we all share that and it becomes our rose garden, I would say. Or our community center to hang out and it becomes also... but we are responsible for that and we can offset our power costs. We don't have to sell that. It would be a direct offset off of our utility bills. I don't know if that helps you.

You would have access to the grid?

There would probably be no access—10 kW I imagine amortized over a year would probably save maybe 50% or 75% of your utility bill. But if you did have access, I don't think you could recoup any of that money—if you do a net metering scenario. Okay? So the idea is you don't want to design it to go more than what your power is. You want to supplement your power with Conn-Ed. They would take it off. So in essence you're buying power at 13 cents per kilowatt hour instead of being a commercial entity, which is selling it to the grid at 3 cents per kilowatt hour. And again, that's why commercials are so big because the scale in order to get that money at 3 cents per kilowatt hour is a lot harder than getting your group net metering at 13 cents per kilowatt hour. I think that's the potential of having a small group community projects that can get utilized. And likewise, with the Stanley plan.

Steven from Shrewsbury. This is more of a national, not a local thing, but if we had a carbon fee—not tax—so Governor Douglas could support it—we could make a lot of these things competitive and they wouldn't be going out and getting coal plants to replace Vermont Yankee and we're not talking about that. Because a carbon tax would be the most efficient, simplest way we could offset other taxes. There would be a price on carbon and people would know that and then we can plan all these other alternatives. But the cap and trade is just mostly just a big giveaway to businesses.

I thought I'd throw that in. I have a question. Ray from Proctor. It seems to me that a lot of the problems arise from the question of constancy of volume of power. In other words, a lot of the smaller generating facilities that people can bring online—wind power and solar and otherwise don't have the constancy that were accustomed to from the grid. And VELCO transmits and part of their mission is to make sure that the power meets the demand—of the power supply that they transmit into Vermont.

Reliability?

Yeah. The reliability question. And it's counterintuitive to me to begin relying so heavily on a lot of small, individual producers unless you have a way for them to share in the capital costs, as well as the...bear some of the cost of connecting to that grid and maintaining the constancy. So again, I don't know

enough about the subject to have an opinion. I'm looking for answers to that. How do we maintain the constancy, the reliability of power on that basis?

And yet be able to support these small generation...yeah. Any comment?

I guess my whole...Steven from Shrewsbury again. My whole point was that if we don't price carbon into our planning, we are going to make big mistakes. I guess that's my point. Is we're going to get electricity from the wrong places and then we'll be stuck with that if—as John McLaughry says if our legislators in Washington ever get the balls to do it and support a carbon tax. Even John McLaughry admits a carbon tax is the way to go. And if we're planning without taking into account the price of carbon in the future, we are going to make mistakes. That's my point.

So what you're saying is—when you're talking about what needs to be considered in influencing electric demand—that carbon issue is like, needs to be part of the conversation?

Yeah. Well, let's not go out and generate all of our power from coal. Because we are going to pay through the nose that eventually. But we will smarten up. We found out as an old Washington Electric Coop member, we found out that 18 cent per kilowatt hour wasn't such a great deal for nuclear power from Connecticut. It took us a while. I was called a communist. [Laughter.] You can't win.

Was about local storage to take into account that you know, the wind is going to stop the reliability and the cost of implementing the plan.

Actually I'm just really beginning to understand the inter relationship with the transmission system and the other components of the system because so often the conversation in public is so often about the generation. And for full disclosure I do serve in the legislature and part of my purpose today in coming here was to really learn and to hear what people were thinking because we have the responsibility of some pretty significant decisions now and coming up. And I really feel I needed to get a better grasp on that and what the planning process is looking like and how it all fits together. I think the transmission component doesn't get discussed all whole lot in public and that's why it's something I really don't have as good a grasp on so... That is why I'm here.

And do you think that the information getting out about these sessions was helpful to you and was that...?

That was very helpful to me and I will certainly encourage other colleagues to come to them. This is a difficult time—this particular stretch because we are right at the end of the session. But I think it's a good process. I keep looking at this thing like it's going to do a song and dance or two.

I'd just like to add to that feedback on that—you can do an exceptional job at getting the word out on this type of an event. You will always have a difficult time in getting a significant number of people to come out to it because, quite honestly you have VELCO and utilities have provided good, cost effective, reliable power. And you look at our cost for power compared to our neighboring states. We are at the lowest cost in the region. So today—on the general transmission and that side of it there isn't the angst.

If you were to bill this as a meeting about Vermont Yankee, you probably would have had people lined up at the door. But it's always going to be difficult to get people directly engaged in this conversation because this is the hard work that goes behind the scenes. This is you know, people don't want to think about the fact that their power lines are there. They just want to know that they—when they throw a switch, that it works. And so you guys get to work in the shadows a little bit realistically and I think you're not going to see a change on the unless there was a significant change in either the cost of the power that people are being receiving or in their reliability.

Jamie and I keep trading here, but I think building on what he was saying, one of the things that I did notice when I read the card was that it invited me to a planning process, but it didn't particularly tell me what's in it for me. It was sort of like why should I bother? You know, what's the relevance of this to me and I think that perhaps that is by and large the system does work pretty well. It's only recently come to my attention that one of the problems we face in this state for technology businesses is the limitations of Internet access into the state. Apparently there is...and I don't quite understand the proper terminology, but it's sort of like one trunk line into the state and if that goes down then access to a business goes down and I learned this at a forum with a number of high-tech businesses and those who have a significant data housing need as part of their business actually house their data at sites outside of the state. Drawing that analo...so the analogy I'm drawing here is that we need to do similar planning for our Internet access because I gathered as I looked around and studied this that there is a lot of—not exactly redundancy, but backup. I mean the transmission system appears to have a variety of different routes that the power could be sent along if there's a failure or a breakdown in one part of the system. And so, um, if I'm not assuming correctly, then that's certainly something I would want to see. But I am almost sitting here thinking I'd like to see a similar planning process for our technology. There are similar ones going on, but I don't think it's quite as comprehensive as this.

Thank you.

We've got a bunch of employees around here so the three of us can't even testify. The...and I was listening on VPR the other day when Kerrick was on with his piece. Um, I'm assuming that the work that he was talking about where they are going after stimulus dollars to do a joint Internet as well as transmission... electrical transmission piece—that's not in this plan because that's so new. Correct?

Yes.

Yeah. That's part of the Smart upgrade process and the piece that they're working there. So I think... the point is that that's something that as I understand it, has been directly recognized and identified as a potential project under the stimulus dollars. But of course, that is a huge issue for the broadband capability around the state. There actually are a couple of trunk lines coming in here to the state—there's not one—there's at least three that I know of on the side of the state. So we do have some redundancy there but it could be expanded significantly and the corridors that are covered by the power lines to the extent that that effort can be really driven forward I see as a huge positive—moving forward.

Thank you. I think those would be excellent questions for staff after the round table and they'd probably be able to answer those. We're again, looking for concerns about the plan, but that's definitely a concern that everybody has I think.

Kerrick. I talked to Kerrick about it. Kerrick Johnson.

My problem is that I'm not informed enough about that.

We need a smaller table. Or a Lazy Susan. I'm not educated enough at this time to have a specific concern. I mean reliability and cost have been mentioned. I'm not sure if redundancy is the proper planning term, but certainly you know, extensive backup capability and the ability to shift and redirect. But my impression is as I've gone around this evening is that all of those things are incorporated into the planning process.

Do you think that the process tonight... do you think the process tonight is helpful that way or do you have a concern that perhaps you needed more information ahead of time?

I'm going to do that.

To participate intelligently and usefully I would have needed more information, but there's no way I would have been able to take the time to get that at this time. So in a sense my goals in coming here I guess are a little bit undermining your goals and inviting me here. Because I don't feel I'm informed enough about the subject to really make a real, productive contribution. Although it's possible that I might have seen something going around the kiosks that might have triggered something. As it happens I didn't. So I don't have any real positive suggestions because it would have been better if I had read this ahead of time but on the other hand, I know that realistically I and most everybody else aren't going to do that so...

Joe do you have any other comments that perhaps were generated by their comments?

Well, it's still on. I guess my only other comment is a question as to what extent do we know, get input from surrounding states and not tried to do it all ourselves?

Group 3

The name is Eric from Rutland County. The first question to me was what was my... well, what my interest is or...

What brought you here today?

What brought me here was generally interest in energy issues in particular—a recent proposal for a wind power project mostly in Ira, Vermont and how that may or may not factor into the mix of this plan and how communities can possibly explore alternate energy sources like that. My initial impression of the plan...

Can we just pass it around to everybody to get those two questions answered? Your name, and where you're from and what brought you here.

My name is Melinda and I'm from Rutland County—Chittenden more specifically. I'm here for... out of general interest of the planning process and to see how the non-transmission alternatives may play a part in the planning process.

My name is Carey and I'm from Rutland and I'm here for just general knowledge base and the presentation has been very informative.

My name is James and I'm from Rutland and I'm here to actually find out more information about VELCO as a company, as well as their plan on how to make the transmission systems better and more efficient.

My name is Frank and I'm here from VELCO in Rutland County—Rutland City in fact. And I'm here to help answer questions and facilitate the discussion.

My name is Brian. I'm from VELCO as well and I live in Pittsford and I'm here to answer questions.

Question 1

Great. So, thank you. So I'll just re-read the question to start the conversation. Based on what you've heard tonight what is your impression of the analysis and draft plan? What concerns do you have about the draft plan? Um, anybody want to take the first shot at it?

I'll take the first shot at it. This is Eric. The plan contains a lot of information. It's a little bit overwhelming. I guess I might be looking for a little more of a verbal summary at the beginning of the session that would sort of the main points in all the written material that would have maybe been a little more helpful in my view. So, I'm still learning.

I guess I agree with you on that—more pinpointing and the initial summary of it. There is a lot going on and it's definitely in draft form and this was available to read before coming in, but it's a little overwhelming just from a public perspective to just take it all in and out what it all means read off the bat. So a better summary or pinpoint of individual—maybe the projects.

I agree with Melinda. The projects—I think they should pinpoint those—kind of covers some of them just so we have a better general knowledge of what's included inside of the plan. And, as they said, it's a little overwhelming so I guess perusing this before was... didn't give you enough time to really, really get your head around it until you went around and spoke to each you know, station and then it helped a lot.

I have something that I want to add to that. Um, it was detailed in the beginning of the types of projects and specifically how many there were... meaning like the 25 and then 19 of them were a substation I believe. But I think just from a layman's point of view to detail what that meant in the timeframe and maybe we would have been better prepared to ask questions I think maybe that's why I had a hard time asking questions. I wasn't really informed as to what I needed to ask questions about at that point.

Eric—two minor suggestions on a couple of the graphs. When I did burrow into the details on page 27 and then on page 26, the grafts are not to scale in terms of the timeframe on the bottom of the scale and I thought that was done well on some other figures and if they could do that in these figures, it would also be helpful to the audience to see over what time demand for power issues to actually change by how much because this is a little confusing.

I'm not sure I understand your point. The timescale... time access on the diagrams on these two pages is not evenly spread out. In other words, if you look at that figure you can see that there's 26 years between 80 in 2006 and nine between the next two bars. And over on the next page you have, you know, 1, 4, and 5 year intervals. And if it's... the other figures show much more accurately the actual, you know, rate of change which is helpful.

Is there something specifically you would like us to cover and help explain things or—an overview of the process that we went through?

No. I mean I don't know what I don't know yet. No. I think I told you...specifics. I did notice in the appendix there is a...you need a definition of reliability deficiency. And I was looking for a basic definition of reliability. Did it mean quantity of power? Or quality of power? Or a combination? Or maybe it's an obvious thing. I don't know. That might be just a little opportunity for improvement.

We need a definition.

I know it's a draft plan. We're just...we're helping you get the next draft.

Um, do you feel like you want to go on to the second question or...?

Would you read the first question again to make sure we got it all?

Sure. Yup. Based on what you heard tonight what is your impression of the analysis and draft plan? What concerns do you have about the draft plan itself? Yeah?

Carey. I think... all I want to say is I think the general consensus at this table is that we are all a little overwhelmed with it and the presentation was wonderful and a little bit of knowledge that we did get here but in order to indulge in something of this matter in detail, it takes time and effort. It's no different than I am an accountant. When I review a company I review the detailed financials—not overnight. You know, it takes me a while to soak it all in and step back and assess that. With that being said, I believe this is a good stepping stone for a second round table with members here and following up where people are prepared to come back with a knowledge base and ask it for the questions. At this point I don't think it's practical to expect that of an uneducated population.

Did you want to say something, Frank?

I was debating saying something else. Do you think a second workshop would be helpful or would it just be contacts at our utility to be able to answer your questions? I'm not saying we're not willing to do another workshop but if we hold one and nobody shows up then...

Well, I'll be honest with you. I think your best case scenario would be to get on educated members of the public to commit to you such as ourselves and come to something like this. You give us the materials. We take it back. We review it with a listing of questions. You don't want to get someone who's educated to come in here. You want someone such as ourselves that are very uneducated so you know what the general population is referring to when they are saying I don't understand what VELCO is all about. That's what you know—no different than a very simple question that we asked at one of the tables when the gentleman from CVPS—we didn't even know that the state of Vermont was number one in efficiency in the nation. It now, it seems kind of like a very trivial piece of knowledge, but I was overwhelmed with that. I did not know that. And it seems like that is a huge piece of information for the general population to actually gloat about. You know, we're Vermont. We are the leader here. That's... you know, I think you would have most success in taking a knowledgeable group of individuals—knowledgeable in this sense, educated, willing to indulge in this information and come back and sit for you. I don't think that that's an unrealistic request to ask.

To add to that I think the population of the people that you want to attend these meetings—I mean everybody learns in their own way, but for me personally, I have a strong interest in all of these topics, but I don't know what questions to ask and I think for myself to gain more out of this it would have been better as a classroom setting rather than the kiosks as it was. I mean it was a great presentation. But like you mentioned the people that you want to attend this are going to be general public and those are the people that the outreach is intended for and so it may have been better for...I mean to have more of a classroom-type setting before asking all of the questions.

You can go if you want.

I think we... the approach we took was to try and make it a little less formalized so that you had the opportunity to ask those questions as opposed to one of us getting up at the podium and going on and on and on. That was our approach.

Yeah. And I appreciate that.

I would echo what Melinda said, though too. I think the kiosk idea was good, but it didn't seem to work for me. I mean I think either if you had a bigger crowd you would have less chance to even ask questions at the kiosk. So I think I come back to agreeing that this sort of instructional thing—there was a big meeting here several months ago where they reviewed some long-term energy plans and the audience had all these little clickers and they voted on things and that was a fascinating and very well done session, which generated a lot of useful data. And so...I mean I'm not saying this is a bad thing. It's got...each of them has different aspects, but I think the public in general—to echo what was said earlier—doesn't know how they are affected by this so they would even come unless their taxes were going up or they're going to run out of electricity or you know, they're having trouble running their AC in the summertime, which looks like it could be a problem soon if that curve continues. So I'll stop there for now.

And if you want a panel, yes, it's scary! If you want a panel of people, pay them! I mean people aren't just going to come out of the blue for no apparent reason. I mean you've got to be realistic about your goals here and realistic in what kind of crowd you want to come. I mean you can target that crowd. I'm going to be president of Rotary. I can go in and get Rotary members. Does anybody want to...?

No. I think we realize it's like Eric said at the beginning—it's your first one and that is...there's nothing wrong with that and the thought I just had was... it will come back to me.

When we did our last long-range plan outreach, we did it more as a presentation—and mostly presentation type stuff where Dean LaForest in fact was the guy who went through and talked about the long-range plan, what the deficiencies are, what the projects on the list were. Right or wrong or indifferent we took a different approach to try and make it more homey I guess or warm, but like you said, it's our first one. We certainly can change.

Thanks Frank. Shall we go to the next question, which I think—did you have a comment, James?

No. I was just thinking pretty soon you'll be begging us to go to the next one.

Question 2

Just two. Okay. The next one is and this is really geared to bringing what you know about the community and events to their attention—to VELCO's attention. And so the question is what information would you like to share that you think planners need to know about activities, planning or policies that may influence the projected electric demand? So again, building on your knowledge as a community and what's happening—what information do they need to know?

Here's some examples.

I hate to start again but I did briefly mentioned this to Dean and not everyone was aware of it, but there was this local wind project proposed for Ira which is interesting from two points of view: one is the community reaction to it initially in the first public meeting they had a few weeks ago. But also the fact that it might stir local interest in their own community or other wind generation projects that might work out. The other thing I'll just...I thought I was...I think in general what I see is the community is very receptive to ideas they can do such as Smart metering, which I know people are looking after. The more power they can have over their own power, the better.

Do you know much about the Ira wind facility? Where it will be located and where it will connect?

I went to the public—he had his first public meeting about three weeks ago and I attended it.

Per somebody [Per White-Hansen]. Vermont Community Wind or something like that is the name of the outfit and I think it's roughly 28 towers mainly in Ira and a few scattered other ones around. I think it's something like an 85 megawatt—is that right?

That's possible. We're putting out a 40 megawatt...

50 towers roughly. I forget how many he was outlining and...but he's pretty early on the process and he just I believe...it was just mentioned in the paper that he hired Jeff Wennberg as his public relations person so that's...and Dean seemed to indicate that it's just in the proposal stage. But it's an interesting development.

Was there any discussion about what transmission facility would be required for that wind facility?

He described tying and directly into VELCO's line. I thought he mentioned Center Rutland or some place. West Rutland. That's what I believe he said was his assumed plan. He had a connection line that was going between two ridges in Ira that was going to connect up to strings of turbines. The big concern in the community is that these are very large turbines—very high up and in a very difficult to access area. So... that's really all I know about it.

To my knowledge, we have not been approached yet on that project so I haven't heard anything.

Okay. Any other community activities or developments for changes or destructions that you think the planners should know?

This is Melinda again. I guess this is more of a question for you guys. So this is a 10 year plan? 20? Okay. Which is like the biggest that you guys...so how?

I was going to say obviously the further out in time you get the more variables that come into play.

Will change. So I guess my question is how much anticipated capacity do you expect to add in that 20 years? I think it's outlined somewhere but I think I missed it.

Um, generation capacity?

Yeah. Or would that be more of a question for the individual utilities maybe?

Well, I don't know. I would have talked to the guy. I had to speak to the individual who ran the planning to see what the forecasted assumptions were. But I know we did have some assumptions for what additional wind would be added. There are some additional generation facilities—without telling you specifically what they are—because it's market sensitive. There are some facilities that are in the proposal stage and we certainly put in our model. But we can only plan for things that we know are coming.

And I guess on the same note, how much do you anticipate that small-scale generation or distributed generation, both on a residential scale and on a small community scale—how much do you expect that to affect the anticipated increase? Or is that already part of the forecast? I'm ready to give it away.

Um, one of the things we did was this year—in the past we would normally have assumed roughly about a 3% load growth for the state of Vermont. A 3% change from year to year. This year all we did was we hired Itron to do a load forecast for the entire state and as such, some of their basic assumptions were some demand resources demand response. Wind... some small wind turbines, some solar installations

and as a result that and to some degree the economic situation—their forecast was I think 1.3% increase per year.

Versus a three.

Right. So it's a fair reduction from...right.

So this figure of 3.2—this green dashed line is it including this 1.3% or whatever you said growth. The line looks kind of steep to me. Page 8. This is the Itron estimate or whatever. That dashed green line indicates the expected growth?

It does say 1.1.

And you may also follow up with Dean and Hans who I think were the ones who were putting this together after. They'll stay until eight o'clock should anybody want to ask questions for them.

But I believe that trend line—red does represent the 1.1% increase per year. The 9010 forecast represents a 90% probability that the load will be less than that. A 10% probability that it will be higher than that. So it's called a... it's a pessimistic forecast.

Yeah. What intrigues me about this forecast—and then flipping over to page 29—this figure that I've seen many times now in public meetings, including the one for the wind power and I believe the last session you had here was this going off the cliff in 2012, which is pretty scary and pretty soon and you know, to do anything requires such lead time and planning and stuff that this to me, seems like a really prices coming down the road pretty quick. That it has to be dealt with but if you can give me some greater comfort here?

Well, there's two pieces to that. Um, one is this I believe represents contractual obligations between either Hydro-Québec or Vermont Yankee or other resources. We still have an obligation to serve loads so whether those contracts go away or not, we are still going to serve power to your house and everyone else's. The uncertainty is at what price? Um, that I'm not going to go down that road because I have no idea.

What is the red dollar price on—is there sort of a price chart someplace that you could give people that shows...?

Cartoon. It would be nice to see that suggestion for your next session—if you could show a chart may be of this kind of thing over time—it might be also helpful.

That's what a dollar pays for. That's not...

That's not exactly what the...

That's not really what you're looking for.

But that would be a handy thing and then you know, you've got one curve and then maybe a curve adjusted for inflation or something.

We just have two more minutes and I want to just make sure everyone had a chance who had any information about what's happening locally to have a chance to share that. I know, I'm sorry. But because we're going to close up—some of the other groups are done—we'll do a formal closing and if you want to stay further and converse, you're welcome to, but I want to release those who have finished their conversation.

So. Say that again. You're looking for a chart that identifies...

Sort of the cost of power to the consumer over time because we know we've been getting pretty cheap power through these contracts up to now and if you could see Vermont relative to other parts of the country, for examples, it might be helpful. They probably exist in some other public meeting that's already been, you know...

There may be some other utilities that may have had significant rate increases over the last three or four years.

I guess I have a technology question. When...we're okay. It's red. And we only have 34 hours left to play. When we do, you know, in our backyard a wind or solar or whatever and we net meter it back to the system, does that require any additional wires?

No.

So the wires can handle both...

Assuming that your installation doesn't exceed the capability of those wires. Meaning your—to manage your house may be 300 kilowatts. And the facilities are certainly capable of going either direction with it—either at 300 to you or 300 to the grid. But if you then install a big, whomping wind turbine that is now 2 1/2 megawatts, then obviously there are some facilities that would have to be upgraded to support that energy. But as long as you're doing something of manageable size—solar panels or combined heat and power or something similar, then you're fine.

How about if a community builds one of those 2 1/2 megawatts wind towers?

Um, it certainly would have to be studied and analyzed to make sure that it didn't put any undue burden on that network. Um, but as long as it was located in the right location there shouldn't be an issue.

But, there is no substitute with making sure you do the analysis. Let me get my disclaimer now. Any facilities to be installed would have to be analyzed at length to make sure that they meet all reliability standards.

So, basically there are just two questions that were asking of everyone who comes in so hopefully, you had your questions answered by going to the kiosk and...but this is...VELCO really wants to hear from you. So one, the first question is—you know, having learned whatever you were able to take in tonight—you know, what is your initial sense of the plan and do you have any comments or concerns that you want to have recorded? And that the second is equally important, which is what do you know that's going on locally that you think is important planners know as they do their projections and make their plans that you think might influence the projected demand, the acceptance of certain reliability solutions, whatever it might be that you have some insight and knowledge that you probably have to share. And I've heard from folks who have been talking to you that that is true.

Question 1

You know, that tonight was a really helpful session because of the level of conversation and the kinds of questions and local knowledge that were brought. So, that's what this is about. So question number one. And you guys feel free to chime in as you are sparked up with new ideas. Right? Is—based on what you heard tonight—you know, what's your initial impression of the analysis and plan and do you have any comments that you'd like to share about that?

Um, it sounds like... the areas that I am more concerned and more knowledgeable in I don't think are really in the VELCO domain. I'm mostly concerned with making sure that whatever grid changes are put into effect are capable of moving power anywhere it comes from.

Because I believe the best way to produce power is... the real way to achieve energy independence, which every politician loves to talk about—but none of them actually deliver on—is to empower the individual. We're not talking about, okay, it would be great if the country could be energy independent. But of course, that's going to take a lot more. But if we empower the individual to become energy independent, um, and I don't see anything in the plan that I've heard about or read about that would stop at. Again, VELCO doesn't really care from what I understand from talking with Dean. The tech...the equipment just move lots—it's either coming in or going out of the grid. And, as far as VELCO's point of termination is concerned it's two-way. It doesn't really care. So, yeah. I think it's good to think about. I like, you know, I was clarified on the iterative pattern here. This isn't like a once in a great while thing, but it's in every three years start over—the process. And I think that's good that that's the plan because I think we need to think about this at least once every three years for the next 20 years. So, yeah. I guess that's... I think I covered the question.

Actually, I will chime in again to opening this table. Um, one of the other things that I have a concern with and it's not really a concern with VELCO. It's a concern with the process of energy planning in the state—is that we have delayed ourselves in making plans to the point where it locks us into decisions. And VELCO—they were talking about they need to five years at least to go through the planning process in order to develop new, big, transmission lines and if you're going to end up taking Vermont Yankee off

the grid you're going to have to bring it from someplace else, you need a lead time to make those decisions. And if we're not making those decisions in a timely fashion, it's making decisions for us because we've and don't have the infrastructure to make the change.

And I guess the drill down on that actually—that's another thought for me, which is replacing Vermont Yankee I think is a good idea. I think it's a good idea for a number of environmental and risk reasons. I don't really pretend to understand the risk reasons. It's just outside of my knowledge domain. I leave that to the federal folks. I don't believe they want us to have a meltdown, either. But it's really a good idea for Vermont economic reasons because it allows us to have the potential to build power sources in the state. Right? And I'll cite wind as an example because we have more wind per square mile in Vermont than any state east of the Mississippi. So, for Vermont to ignore wind as a potential generation source is just silly. I don't think it should be everything. I think it would be...to do it as everything. But for example, if you build 500 one-megawatt wind turbines, that would replace the entire power—again, you know, excluding base load issues and whatnot. That would replace the entire output of Vermont Yankee. Not the one third that comes into the state. But the entire output. So you could build one third of that and just worry about Vermont. If you built...if you built a full replacement in wind, the state could then become a net exporter. So now bringing to wind... bringing the concept of base load back into it, is there anything... I guess my concern is—is there anything in the VELCO plans to enable or potentially block that capability for us to have, you know, pull the base load from the regional grid, but then when we've got... on windy days push back in and effectively net meter the state if you will so that...I mean we could... with 500 wind turbines we could meet the entire current electrical demand of power consumption spread over time. Again, you have to have the grid to balance the ups and downs. So I don't know if there is an answer to that question or not, but that's a concern.

Anything else you want to add? Any other of your conversations around that led you to have any comments or impression as the initial announcements? I know, you're a listener.

Oh. Sorry. I know. I've had my opportunity to comment on the plan.

I mean, I haven't read the full thing and I was kind of hoping for a more general overview from the presentations and I understand... I think it was valuable just to go with a format that was given there, but you know, I'm... I'd leave it to the experts are really. I just, you know, want to make sure that certain capabilities aren't ignored, understanding that this iteration may not be the iteration that makes it so that you could replace Vermont Yankee with wind power—only if that were even possible. I don't know. But, yeah, I mean, frankly I don't know what's being done in this area.

I get the sense that there is a lot of—in this first pass, there is a lot of you know, grease the wheels, keep the system running, replace 30 year old equipment that's got a 30 year life span or at least build in some redundancy capacity for stuff that is expected to fail and can take days to replace, which is good. I mean, we've got to keep the lights on.

Again, another comment that Allen made that spurs something in me and more in the process of that and these hearings and that is I also am not very... I don't feel well informed and I think I may well have

learned better through a presentation form. It's just my own personal... because I am not up to speed. I think if I were... or had read the plan, I would have been better prepared to come in and ask questions, but...

I come from a... starting at zero—I have no momentum on the issue. You know, the first I really heard of it was I think the e-mail from you. So, I was kind of putting off reading the plan in detail after... so that I could first get, kind of a big picture kind of person. I like to understand the high level and then drill down to the details. And I get into the details when I have the time. I mean, that's where the devil is. And I always find things to comment on there, but I was hoping to get a high level introduction so that then I could launch off of that and then maybe dig in or if I felt necessary. Maybe the high level would have just been like—all right. That's definitely something that's way outside my knowledge domain that I could be of any value for.

Well, the good news is that the public comment time will be open online through the month of May, basically. So, you can go from tonight and read the plan and comment online. So, the staging sounds like it might be a little bit, but that there's still that open.

This is it?

That's it. And all that information—that's all posted online as well so you can digest it as it works better for you.

Yeah. I mean, I would love to. Just to be totally honest, I don't think I'll get through it. I mean we've got so many things going on. We've got to make sure we—our big thing in Hartford right now is we've got \$50,000 coming from the federal government as long as we fill out the paperwork to say what we're going to spend it on for efficiency projects. So...

That's the streetlight or is that the inventory?

No. That's the ARRA funds. The stimulus money.

To do... but what are they going to be used for?

Specifically energy efficiency and/or carbon reducing projects.

But you don't have anything... specifically in mind?

No. We had to come up with—yeah. No we've—but it's not for this. We can talk more, but I don't think it's worth commenting here.

Question 2

Would you call it—the second question that we have a group is whether—is there some information that you would like to share with VELCO and utility planners that you think may influence projected electric demand in this area?

So that may have an impact. Whatever plan your... is going to have an impact on Hartford's energy?

Absolutely. Yeah. I mean we're looking at turning off 40% of our street lights and removing them so that's—I don't know what that equates to wattage wise, but it's certainly is a lot of money for the town. And not for Green Mountain Power anymore. [Laughter.]

And for them it's a lose-lose because it's off-peak power so they don't even—it's gravy money for them and they're not going to have it anymore. But they are very good about it. They've been very helpful in the process and I can definitely commend Green Mountain for their help on the effort and in all that so... there's that. And the \$50,000 we're looking to spend probably not so much on electrical specifics stuff. I think the bulk of it is going to be spent on building efficiencies, to reduce the heating demand, you know, which has greater financial and carbon reducing impact. But there is definitely a couple of the projects we've cited for consideration and are being investigated by various members of the commission now are electrical-based. But just no generation yet. I mean it's on the list but it's not on the \$50,000 list. It's on the some day pipedream list and it's... the one thing that's electrical specifics besides the street lights is potential offices. Let's see. Town facilities, electrical education projects. You know, Deb Sachs and her whole outfit [VECAN]? So basically thinking about bringing her in to educate town workers and comment and suggest on how we could some small things like maybe change out some appliances. That's actually separate from Deb. It's one of the things were looking at—it's upgrading the efficiency of appliances. So we're only talking about a relatively small impact I think from this round of projects on the electrical standpoint. I personally have on the some day list Hydro generation from White River using—I would think—I don't think were going to build a dam. I hope are not going to build a dam in White River. But there's a potential there for the new Connecticut based underwater windmills so Hydro Mills.

So the waves?

Not waves. But it's just like a turbine—like a wind turbine, but for water and you stick it in the water and as the water flows by it spins the turbine. It's a relatively new—for water, but it's a very old concept. So we're looking at as a maybe someday. I don't think that's going to be a giant amount of generation, but it can certainly help. You know, we're talking kilowatts not megawatts I think. And then I would love, but it's way down the list for political reasons: the wind. I want to put a wind tower on Hurricane Hill.

Hurricane Hill!

Yeah. Exactly. So when you're driving from New Hampshire and you come across into Vermont, you're greeted with a nice, big wind tower spinning beautifully and reminding you how beautiful the world is. So... I don't think that's... that's just me. We haven't talked about that as a town yet for sure. But... and I don't know who owns Hurricane Hill. It's just that it would be a great site for it.

Any other things that you know that might be happening locally conservation, population changes, economic changes that you think might be...

Yeah. The only thing that I was aware of was the street lights.

Which I think is a pretty interesting idea. And I think your idea about wind is very intriguing.

Yeah. I love these enviro...these economic comments about oh, how are you going to shut down Vermont Yankee? It's going to destroy the economics of the region or what not. It's like well, if you just shut it off your screwed! There are a number of ways. If you just turn it off—but if you replace it... locally generated sources with nothing but wind. I mean, instead of sending the money to Louisiana or Mississippi...

Louisiana.

Louisiana is grand ??? Instead of sending all the profits down to some fat cats in Louisiana, all the profits stay local—to municipal or cooperative renewable sources and Vermont just booms. It just booms.

What about the Hartford energy commission?

What about it? Well, we got it founded with help from Bob in August of 2007.

So fairly recently?

Yeah. So we're a year and a half into our operations. We've been kind of plodding along until the beginning of this year when the town manager lit a fire under the streetlights project. We have just started looking at, but we had just started looking at it for months prior. I mean we've been looking at it for four months because we only need to once a month. So... he lit a fire under that I've got the regional commissioner of the planning commission. They were already involved and he lit a fire under them and they had resources to put in the project and they got a hold of some commission members and a couple of towns and he and another town staff member, the regional commission member went out with our energy commission members and drove every mile of road in the town and documented every... inventory and documented every single streetlight and identified 40% of them that were unnecessary. We actually have a list of criteria we use to identify unnecessary lights. You know, first of course, there is redundancy. You know and that's the bulk of what we're looking to turn off. It's just that there's no added value in having the light on. There's nothing. There's no difference in turn it off, you know? It doesn't make any significant change. And the other one was necessity, which for example a lot of rural roads in Hartford have streetlights, but there's no pedestrian traffic on those roll roads and so lighting the road doesn't actually have any safety benefit. Streetlights have only a safety benefit when... and this was confirmed by at a convention I guess it was. Anyway, Chuck Wise from the Regional Planning commission went down to D.C. where they had a big convention and they confirmed his understanding—his anecdotal understanding—experts confirmed that there is no correlation between vehicle accidents and streetlights. Headlights work.

If there is a nighttime vehicle accident, it's not because the street wasn't lit. It's for any number of other reasons. But pedestrian accidents—there is a correlation between lighting and pedestrian accidents so

where there is pedestrian traffic you need to think about street lighting and where there is no pedestrian traffic—turn it off. So that was the criteria in a nutshell that we used to turn things off.

What are some of the other things that the energy commission is doing?

Well, that's probably the... one of two of our hottest items—the other hot item is that we've got \$50,000—as I mentioned earlier. We've got \$50,000 coming and potential money and then kind of tailing on bellows, or going to try and get the Selectboard to set up a revolving fund—specifically in town legal terms—a reserve fund that's funded by the savings from our energy projects. Primarily funded by the savings from energy projects so that when we turn off the streetlights...

That would then be used for future energy...

Which would then fund the fund and so on until we run out of things to fund. And then they'll use the money for something else, like cutting taxes or building parks or...

Aren't you doing the EPA inventorying thing? Is that what the \$50,000 is used for? Or is that something different?

No. That's completely... I mean we could use that for resources on the inventory project, but we've already made significant headway on our town inventory.

Which is restoring the town buildings?

The energy used for the town buildings...

And facilities?

Both for heat and electrical loads. We've been focusing on heat again because that's where the financial...

The heating at the town municipal building?

The town owns buildings, which is the fire and police station, the Bugbee Senior Center, the Town Municipal Building, the West Hartford Library, and the 5th one—oh, the Public Works Building. There might be a sixth one, but those are the main ones. Those are the town owned buildings. There are a couple of other libraries, but we don't own them. The library boards own them. We only own the...

It's not another board. It's two other boards. Every library has its own board! We just happen to own the building and pay for the fuel to heat the West Hartford Library. So we've been... and that's our... that was by far our highest usage per square foot. I mean the BTU's per square foot in that place—it's huge! I mean it's not a big building, so it's not our biggest cost, but it's got the biggest ??? per square foot. Yeah. It's through the roof. I mean, it's like a tent with holes in it. It's...

It's completely energy inefficient.

Yeah. It's a completely ??? of building.

Oh. That's the one that Gary did the audit for you on?

Yeah. He's still working on that report, actually. I got a hold of him and we're looking at that location as somewhere to spend some of the \$50,000 on.

It sounds like that makes sense.

Yeah. Well, the library board has already put insulation in—extra insulation in the attic, which is a great first step and doesn't stop any additional stuff that needs to be done. But for example, the windows there are barely there. I mean you could push on them and they would fall off the building. I mean really. You could... if you tried hard enough you could probably just push them and they fall off. They're just not... they're all warped and...

Are they the original windows?

No. No. They're not. They're vinyl windows. They're relatively new, but I think after they were installed the building must have shifted...done this...

And all the windows kind of went...so there are a couple of windows that are always effectively open a couple of inches. Just where they meet... where the two panes meet its like a gap, you know. It's just terrible.

I'm curious about something. You mentioned when we were talking earlier your getting resources from VECAN so you're obviously aware of the whole network. Where would you say your energy committee fits on the spectrum of how active and productive... it sounds like a lot is going on in your town. Do you think that's typical of the energy committees in the state?

I think Bob would be better to comment on that because he gets them all organized. I mean, we went to him to get things organized, so I don't really know outside of Hartford... I barely know... I barely can keep up with what's going on in Hartford.

I think Hartford is one of the more active ones, but I mean, I would say, you know, I'm not in touch with all them, but I would say one third to half of them are fairly active, but there are a few that are kind of just wondering what to do. But that's... we're trying to come up... I think the first thing that we try to do was get them going and now one of the things we've really been actively doing is trying to create programs for them.

To get them focused?

Yeah. Because they're really interested in doing things. It's just a matter of where do I start? What do I do? What's a first project that I can get going on? So last year we did this button up workshop. We had those in 100 towns in the state. This year we worked with Efficiency Vermont to do... it was kind of a pilot test this year to...Vermont climate energy mobilization where it was training volunteers in the

community to do simple weatherization steps in their communities. And we did it in 11 or 12 towns... maybe it was only 10. It turned out—10 towns. But I think there were an average of 40 or 50 homes per town and we're going to maybe repeat that next year. We are trying to come up with model programs like this street lighting that other towns can kind of take a package and run with it—I've created a little how to...

Yeah. This street lighting I think has been used by those. I haven't been really directly involved with the streetlights. I've just heard about what's going on, but that was a document we got hold of and I definitely look through and it was great. If anybody is thinking about... if you have streetlights in your town, you know, go get this document and it will just walk you right through it.

Well, if you're interested in more detail, we've got the regional meeting—the Upper Valley Energy Committee—was it semiannual we do that? Or is that... Vermont is annual. So that's separate from the one that we do in December, right? Which I haven't actually been able to attend yet. I always have something going on on the 6th, right? But at least in the Upper Valley—it's New Hampshire and Vermont—you know, regional committee meeting.

So VECAN once a year is pulling together all of the energy committees on a statewide basis.

That was the VTC—the conference with VTC. I didn't go to that.

And then we're also trying to do it on a regional basis once or twice a year to... like, we have one happening in a couple of weeks in the Upper Valley and others... ones that have happened in Central Vermont and up towards Chittenden County and down in the Windham area so... is just an effort to try to pull the various committees from the region together, update everybody on what projects are going to work and talk about roadblocks, successes, and look at possible regional collaboratives.

Regional energy planning, regional renewable projects—things like that.

I just wanted to say a few thank you... on VELCO's behalf. Thank you. Yeah. I really... I said to someone we have very high quality/quantity tonight. On behalf of VELCO I really want to thank you for coming. Steve...

On behalf of the Department of Public Service—thanks for coming and if there's anything that you'd like to talk about after this official round table is up, I'm happy to stay.

And I also just want to acknowledge—we had great participation also by CVPS and GMP and the VELCO folks so we just on behalf of the whole group that's doing this road show thank you very much for spending the time on such a beautiful spring night—to come out and talk with us about this wonky subject. It's very important.

We might as well keep coming on.

Thanks for all your effort.

Process Feedback

What a monumental undertaking. So how many of these do you have? Five?

We have six altogether. And this was number two. So we have four still to go.

Yeah. And we learn—each place we learn something new, you know? Whether about the design or just what's happening. I've also started at square one.

Maybe zero. And it's been fascinating.

We are really struggling. I was listening to your comments about the expert... that you had hoped for more kind of a presentation style.

Also, a broader overview.

And we're really struggling with that because the tasks that we have under the law is to go out and gather input and so we have been trying to create a design that would strike a balance between giving information and listening. And a number of people in these first two sessions have said, you know, we really came without enough of a foundation to know really what questions to ask. So I'm interested in any advice about this topic for...

Well, just to repeat some of my earlier comments along... you know, I was kind of looking at this to be the gateway into ??? if necessary because I just really was coming for somewhat selfish reasons for my role as the... with the energy commission just to understand. You know, I don't have any idea what this is about so how can I comment on it? You know what I mean? So, through the conversation I got some understanding of what's going on and I think I could provide... I gave some ideas that provided some valuable feedback as far as that's relevant to this effort. But, yeah. I think it's good for me to know what's going on. As I mentioned, because of the hot items we have going on because the energy commission—you know, I have two little kids and a relatively new home that we're in and a very demanding job with a recruiting company and in this economy you can imagine. So, resources are tight. So, I don't know if I will get to this in time to comment on it publicly, but I don't really think that I would have a huge amount of value to offer on specific details of the plan because it is just outside my knowledge domain. So...

Thinking about that issue—should you provide an overview or not? I think that it would be helpful and if you could do it in a fashion so that you wouldn't take away the opportunity for people to provide comments and it might help facilitate discussion.

I guess the underlying question is well, we've come to comment, but on what?

I have lots of energy related comments, but are they relevant to your needs?

I imagine going to your website but then time constraints... I just didn't have time. So I think...

And based on... maybe I would have done more homework if I had expected to not have it. You know what I mean? Like I expected, based on the agenda, to get there. So I said—all right. I'll worry about this after...if I feel like I'm missing something that would come out in the details—without digging into the details. That kind of thing. You know what I'm saying?

Burlington, May 5, 2009

Group 1

I'm Karen Vogel from The Snelling Center for Government. Is that all I'm saying?

So just state your name, where you're from and briefly what brings you here today.

So I am just kind of sitting in and listening but I live in Essex so I'm close by.

I'm Adam Lougee. I'm from the Addison Regional Planning Commission in Middlebury. I am here because we participated in the NRP and wanted to see this process participating from that or stemming from that.

I'm Paul Conner with the City of South Burlington. I also live in South Burlington and I was here just to learn about what the long-range plan is and provide some feedback where appropriate.

I'm Robin Scheu from Addison County Economic Development. I also live in Middlebury and I've been in this job about six months so I'm actually here to learn.

I'm Deena Frankel from VELCO.

And I'm Steve Litkovitz from the Department of Public Service.

Question 1

All right. Thank you. So basically we have roughly 20 minutes for two questions so 20 minutes each or 40 minutes if we get through the question and it feels like you've said everything you want to say and then will move on to the next one. And the two questions are on the page but the first question to start with is based on what you have heard tonight what is your impression and analysis of the draft plan and what concerns do you have with the draft plan? So anybody who would like to start?

Hi. This is Paul. I guess that my impression of the plan is that in terms of capacity needs that the intent appears to be planned—for lack of a better term—in the worst-case scenario... what is the likely highest trend for what need there would be, um, and the concern would be just to make sure that in this plan it contemplates and provides some guidance back to the utilities and maybe even the plan itself as to how that worst-case scenario can be mitigated and how there would not be a need for some of these upgrades.

This is Adam. I have a bigger picture concern I guess than the draft plan itself. It goes to whether or not there is a level playing field for all the alternatives that are available. VELCO is a transmission company.

It is subsidized by the ratepayer and through the ISO so it has funds readily available with some certainty. Efficiency Vermont is growing in its reach, but is not necessarily mission driven to... or is just becoming mission driven to work with VELCO. Generation is still solely private-sector or mostly private-sector or utility-driven. It's not necessarily funded by the ratepayers and therefore, may not have as much certainty and be as available in this planning process as it should as an equal player.

My one other impression would be that in terms of what the planning needs are for the next 20 years it appears as though the stretch that we've recently been through in terms of physical upgrades is more substantial for the last 8 or 10 years with the western quarter upgrade and then all the substation upgrades planned for the next year or so than are being planned for the future over the next 20 years, which leaves me with the impression that a lot of our large scale needs are mostly met for the next 20 years and obviously that's only at the transmission level, but that's the initial impression I get from. I don't know whether or not that's reality or not, but that's what the plan suggests to me.

Question 2

So then, as I understand it, another purpose is to give people an opportunity to provide input into the plan so what information would you like to share that you think planners need to know about activities, planning or policies that may influence the projected electric demand, so... anything to add or—that you know that's going on in your community or—concerns or questions that might be helpful?

This is Paul again. I guess I would say that it appears to be in the planning work that the summer load is now outdoing winter load and that's is what that's being planned for. I would think that as Adam has alluded to before that as Efficiency Vermont's mission starts to look a little bit more in this direction that there's going to be hopefully a lessening of the increase in demand during the summer as we start to look at efficiency measures in that way and that's something that should certainly be taken into account and I would recommend also that we look to see how activities such as beginnings of finding the trend of larger and larger homes starting to reverse themselves a little bit—just to follow that and see whether that's going to continue into the future and what impact that's going to happen. Because presumably larger homes means larger air conditioning, means larger energy needs. If the trend continues to switch back a little bit, then that will have some impact that should be watched.

Can I ask a couple of questions? This is Adam again. The plan assumes a 1.1 and you will percentage rate of growth and is based upon those demands. I'm not sure how often VELCO looks at those assumptions. Um, they may or may not be accurate moving into the future, but they may change depending on other things that we do.

And I guess lastly I would note that one—I guess it's not really a demographic change, but as it appears as though the automobile industry is moving itself closer and closer towards the reality of having some kind of plug-in hybrids—like a Prius or something along those lines. And the implications of that could be fairly substantial and obviously it would be very important to have the... work with the power companies individually to see what... how consumer demand can make sure that people are plugging it in—say, at

night time, at a lower rate than doing it at the peak hour which would potentially have a substantial load factor on VELCO's lines.

Thanks. This is Robin. In terms of information to know about—plans for new local generation of energy, I know where looking into doing some stuff with hydro in Middlebury. We have the Otter Creek that comes through and that could have some impact. People are very interested in alternative energy sources in Middlebury. Middlebury College just opened their bio-gasification plant and they are trying to go carbon neutral by 2016 so they are really reducing the amount of energy that they're expending. We have an energy co-op that just got to fore-launched about a month ago... six weeks ago, where people can get wood pellets from a wood pellet manufacturer in Clarendon and it's brought up and delivered so there are members signing up for that. So there's a lot of interest in alternative energy in Addison County.

I was wondering if you were questioning the rate of growth.

Well, there's—sure. Um, the 1.1% of rate of growth.

Yes. This is Adam again. I was questioning the 1.1% rate of growth and how accurate it will be into the future.

Beyond what Robin was talking about in Addison County, are there... is there information that you know about that would lead one to think that there... the grade might be an accurate in Addison County? Is there something that people need to know about something going on in Addison County? Huh-huh...

There are no... I don't know of any big, big changes other than what Robin described with Middlebury College probably being the biggest demand change. That will probably replace more heating oil then electric, but there is certainly a pretty strong and pretty recent movement towards efficiency and local generation.

I would like to echo those comments to say that as I was noting before that it's worth exploring to see, not just the trend scenario of the last 10 years but to see what the possible other scenario will be over the next 20 years and also to establish a target in that what we're seeing at the local level and at the regional level are a pretty substantial ground swell of attempts and I think beginnings of a success of establishing targets for how much energy use there will be—either not having growth or seeing limited growth or seeing reductions. And that's not really reflected in here to a great extent.

I was going to answer the question that you asked about the cycle of planning is that one of the things about this process that...is that an update is required every three years so as we... by the time this goes to the Public Service Board we are like a year and a half away from another forecast—that, then has the potential for being updated by whatever trends have occurred between now and then. So it is sort of a cyclical process that gets updated pretty frequently. The other factor that comes into the picture now in the next six months that hasn't been part of the picture until now is Efficiency Vermont is working on its very first long-range forecast that goes on the same timeframe as VELCO's long-range forecasts. So, we

do a 20 year lookout—they are now doing a 20-year look out on, on demand-side management, efficiency measures that will feed into VELCO's forecasting process. And this will be the first cycle where that has actually been... where both processes have actually been in place and have been timed to complement each other. So there are some... I think those are in response to the question you asked.

One small thing I might add to that is that transmission projects are coupled to loads, but not necessarily to dates. So, if you look at that plan and you see a project for let's say 2018, it's really coupled to the load that's expected in 2018 to the extent that that load doesn't materialize for whatever reason, then that project would be ???.

Group 2

So, I'm Rick from Williston.

I'm Michelle and I live part of the year in Georgia, Vermont, and part of the year in Burlington and I work in Winooski. I recently relocated to this area from Lamoille County, but I did grow up in Chittenden County, so I've been involved in this region for a long time.

Um, I'm Jenny and I'm from Charlotte and actually, I've had an opportunity to come in on a long-range plan as a member of the Vermont System Planning Committee. But there may be other things that I might want to talk about as well. But other than Charlotte—I'm on the Charlotte Selectboard.

I'm Kim Pritchard and I work for VELCO and I live in Castleton.

Uh, Tim Follensbee, VELCO Environmental.

Neal Robinson of VELCO. I live in Essex.

Thank you. So, I'm just going to leave this on and the... I'm noticing already as I'm skipping over the notes—if there's anything more about why you decided to come today, what you want to say as for answering these questions, um, I'm looking at....[laughter].

Question 1

So, there are basically two, main questions that were on the agenda to talk about tonight and... that I'll just throw out there and then the chalking stick to you two. The first one is, based on what you've heard tonight, what is your impression of the analysis on the draft plan? What concerns do you have about the draft plan? So, your oppression and concerns. Jenny, do you want to start?

Well, I've already had a chance to comment so I don't know if I have anything to...

Do you want to put them on the record where you...

Well, they... I think my comments are on the record already. I don't know if I have anything to add to what I've already... I'm interested in this process and how this works with the public outreach. Maybe I should say that?

That would be helpful. Cue me up for something since I didn't come....is this one now?

I did want to come tonight to see how things were going with this public outreach and was hoping that there would be a good response and I guess there have been some, but it would be great to have even more people coming and being involved with this. It seems like somehow you have to make that link between the public and the utilities and people need to be aware of what's going on and informed and able to participate. So, I know in our area we've... I think in our town there's been a little bit more involved with and energy committee getting going and being more active and I think as a town, we're going to try to be doing more—mostly to conserve energy and that sort of thing. But I think there's probably a lot happening out there that no one person knows about and if there were some way to kind of figure out how to compile all that information—maybe Efficiency Vermont is...but...or the State, but, anyway.

So it sounded like in the question of what drew you here tonight—it's to a large degree in the role of the Charlotte Selectboard sort of been a conduit of information?

Yeah. Well, as a member of the Vermont System Planning Committee, but also the Selectboard, because I think, as a town—well, we have already been involved with energy issues with Northwest Reliability Project, but should be continuing on and I think whatever information I can bring back to our town—I think would be useful. And to our newly established energy committee, so...

Uh, this is Michelle and I would say I haven't had a chance to fully review the draft plan and so I guess one question I would have is... was the draft plan to send out in advance to various entities... planning entities, communities, that sort of thing. Or just available at these forums and it's... as we heard earlier the actual plan itself is very big and it was distilled into this executive summary obviously. So it's a lot to take in, in terms of you know, sort of being just exposed to it this evening because I was supposed to be a facilitator tonight. But I got pulled into being a participant from the public, which is fine. And I would say that one of the key things is making plans like this accessible both in terms of distribution, but I think even more so in terms of the content being understandable and accessible to the general audience in terms of bringing people in to have an understanding. And I think you've done a great job of helping people to understand the difference between transmission planning and distribution planning and generation. So I would definitely complement you on that component of the planning process. And, can you repeat the question again?

Sure. The first one that we're focusing on—what's your impression of the analysis and draft plan and what concerns do you have about the draft plan?

I think the distribution concern is the first one.

Yes. Um, and then I was very excited to see that such an extensive public engagement process was occurring with this 20-year planning process. Having lived in Lamoille County for the past 20 years essentially and having run into transmission planning opportunities on the Waterbury line running up through to Morrisville, um, and understanding some about a distribution loop and reliability issues—

that part of the transmission lines for that region. When it came down to helping the public understand—did we do all the investigation needed possible to examine all the opportunities that might be in place beyond building a new line or upgrading a line, which would involve more right of way expansion, etc. and, environmental impacts. Firstly, and... so on the demand side of management, have we taken care of the things that we were supposed to have taken care of in advance of saying yes, we need this line for it this transmission expansion or the substation expansion even. And then, on the cost side also sort of—Lamoille County is specific but I think this would probably apply to other parts of the state, um, are the large users of electricity where they are required to be making capital investments as part of their business expansion if they are creating more transmission, upgrading transmission lines to accommodate significant users such as Stowe Mountain Resort for those sort of folks. Um, is that being taken into account in the planning process so that the cost allocation that we're dealing with for doing these types of public investments are being properly accounted for and, um, it's—I'm not sure...I'm sure like there is background information on how we account for large, private users of the and how they will be, you know, part of the cost allocation. And I also understand that ISO New England component of how we fit into sort of system cost allocation across New England. You know, are we sort of stepping all the way back and I don't know whether or not this planning process does that. So, that would be my only comment—is you know, are we seeing the right distribution of costs for those large users? So those are sort of the two key things.

So, since we have a small group—I don't want to put you all on the spot because that's not necessarily the purpose of this part of it, but is there... shall we pause it for a second and see...

We don't have to pause this...I mean pause figuratively. Are there any parts of... there are I think essentially two parts of the question. Any parts that you would want to address now or shall we just take this where... the first part being, um, ??? distribution of the plan before these forums and the second part being the cost issues.

Demand-side management and cost issues.

Clearly, the costs related to Lamoille projects saps a lot of energy from many, many people. Uh, we've reacted to that by putting together—it's called the Vermont Transmission Agreement Working group, which spent about nine months looking at all the vagueness and contradictions within the wording of the transmission agreement itself. To reach an agreement on how we handle—especially cost allocations. That group was disbanded and, as a result of that, there's a newly formed operating committee, which is...it's got some bylaws, so certain utilities are on it as a result of their percent ownership that Vermont Trans...Stowe is now a member of that. But basically we laid the foundation so that when we have a project like Stowe, which had nothing to do with ISO New England because it was entirely Vermont...

Uh, there is a process now to reach cost sharing agreement before even the CPG application goes forth. So I guess my response with my view is the plan at this point doesn't address that. But there is a process that when each of these projects takes on clearer form and we know which utilities will benefit and

which will not, we have a process in place now that I think that will comfortably... comfortably in the fact that we won't end up in Washington in litigation. Cost allocation is a painful process even when you have a good process to deal with it. And we do have I think a very solid framework going forward to help with fair and known cost allocations and agreements will be reached for the project is perceived.

Is there any reason to talk about financing and cost allocation within the context of your transmission funding process?

I would need Deena or even view to respond more to that. I don't know in the big process when those issues to be dealt with seriously. Because I know there is a lot of analysis on NTAs before we even know whether they're going to build anything in the Department of Transportation. So I'm not sure where in the overall process. I think Deena is better qualified to answer that.

And it sounds like, for the sake of the process that were trying to achieve here though that getting that question on the record and having it responded to on the record is the goal for tonight. So again, we're kind of—Bridge I didn't mean to put on the spot to do that, but...

Well, that was a helpful explanation because I think it does tie into the sort of thinking about whether it's important, you know, to be thinking about that in terms of public investment, which ultimately, that's what all of this is. So...

So I'm going to go to the second question unless there's anything else about concerns, impressions, that you all want to share first. Jenny, did you want to share?

Yes. There was just one other thing that I was thinking about that sort of has happened more recently about the long-range plan and that there is a larger draft and it turned out that a lot of the information became... was found... it was determined that it should be confidential information. So, a lot of information that we saw on the committee is not being made available to the public and there may be other information on other projects that has to be removed from websites and, um, that's something I want to learn more about because I think that it's just... it may be a requirement. It may be needed, but it sort of takes away the transparency and...

Some of that is federal regulation but Dean is the expert on that.

And I did talk with him a little bit. I know will probably have more discussion about that, but that was something that came along recently that I...

So I know absolutely nothing about this, which is good, I think. But, what is your impression of why that...that's the case? Why this information has to be withheld?

Well, it has to do with information that could be used... planning information that could be used by terrorists.

So, it's national security?

Right. Yeah. But there's been a lot of information on... already out there in the past and... will probably learn more about this I'm sure. But is it really necessary to be removing all this information? What's going to be missing for the public? What will people be able to see and um, about the process? And I can already see some things that...that may be missing from the earlier version—and this is really a nice document and easy and good to read and has a lot of good information, but there are maybe it's something that we're missing from the earlier version that I think are just good to have out there, whether people read it or not. I know people don't always pay attention to these things, but...

Right. So the concern being about the completeness of the information and whether there might be other ways to convey that information that would compromise security?

Right. Or even whether it's necessary to um, remove that information. And I don't know how you determine that.

You can say a lot of things need to be removed because they provide some sort of information, but...

Question 2

Sure. Okay. We'll go on to the second question, which is about the local issues. About if there is anything that you think the planners need to know about what is going on in activities that you are aware of—anything that should be brought into the planning process. And if they gave some examples. Plans for new combo local generation of energy, energy and efficiency and conservation efforts, obstacles or barriers and trying to implement efficiency measures, to install local energy generation and economic or demographic changes in the community. So, anything that needs to be brought into the planning process that the planners might not be aware of? Either—Jenny?

I don't think there's anything necessarily in Charlotte that would have a huge... I think we're... I wonder if it's something that, as a county, it would... that would be a good...good to collect it by county rather than maybe by town.

Michelle, anything?

I would just say that I think Deena is already working with Vermont's Regional Planning Commissions to collect a lot of demographic and build on analysis information in terms of future growth patterns, um, to help with some of the projection information, so I think that's a great way to approach it. I think there... one of the things to watch out, which we won't have enough information on by the time this plan is released is how some of the investments in demand-side management that will be coming out of the stimulus bill federally will, potentially provide some new alternatives and I think that needs to be watched closely. And I think the plan could speak to that in terms of following a trend that needs to be addressed. I think also the advent of energy committees, which Jenny alluded to having one in Charlotte and being on... provides an opportunity to maybe have some at the community level... having people focus on demand-side management more intensively and their local distribution companies working with the energy committees to understand what impacts there might be on demand-side management that the energy companies need to be communicating back to VELCO. So that's another trend that

should be watched. Um, and then I think my final point would be to be looking at transportation applications for utilization of the grid system and with more electric hybrid cars coming on an understanding the capacity of the trend... sort of what the need is going to be on the distribution side and what kind of capacity and how this, um, system of energy demand might be different than other applications that we might have going into the future. It's probably not on the immediate 20 year time horizon, but it's sort of starting to merge into that with... in terms of the total energy picture, transportation and about 45% of the pie we start to see some transference over to utilization of electric energy for transportation—that might make a difference. And also, if we end up... I can't think of any... there is a trolley car study going on in Burlington, but you know, I don't think it'll be like a huge, like electric demand or anything like that. Those are the big things. And I think other things locally. You know, obviously just looking at how new, localized searches of generation are maybe going to impact the need for sort of power transmission connections to the outside world outside of Vermont and, you know, how much more or less we might need based on our own capacity. But given the growth trend that I'm looking at on that chart over there, you know, we're still going to have to have upgrades. So those are the big things that I can think of.

Anything that needs clarification in any of that? Jenny, anything else?

I think the question of economic transmission and I know that was mentioned earlier, which is good. Because I was hoping that it would be brought up in the discussion because the Vermont System Planning Committee doesn't deal with that. But it is an important planning problem I guess and something we need to pay attention to and it could impact communities. Um, as far as the transmission lines for transmission infrastructure.

Is the Vermont System Planning Committee a well-known entity for people who are not completely naïve, like me?

No. It's not well known.

Well, what is the Vermont System Planning Committee?

Well, it's a...um, committee that was created after a public service for docket that was looking at the issue of transmission planning in the state. Some of the... in trying to resolve some of the problems that were seen during the Northwest Reliability Project so the committee was formed as part of the planning process—and Bruce is on the committee...um, to um, well, first of all—there are representatives from all of the utilities in the state and VELCO and Efficiency Vermont is a non-voting member. There are public representatives—three public representatives. And the committee looks at specific projects and VELCO's long range plan that are—at the reliability deficiencies and ways to resolve it and the intent is that through this committee alternatives to transmission might be considered earlier rather than later.

And there is a link on VELCO's website. VELCO.com to the VSPC website if you wanted information. And there's also a link to our public outreach efforts in relation to the release of this plan.

What's a final release date and I guess I would ask? This is a draft?

July 1st.

And the public comment period will end May 25th I think is what...

St. Johnsbury, May 7, 2009

Introduction

Thank you. I'm Bill Morrison from Newport Center.

I'm Ken Mason. I'm the manager of Lyndonville Electric Department from Lyndonville Vermont. You want what brought me out tonight or are we just going around???

Okay. What brought me out this evening is one of the projects that VELCO is considering and I saw in their presentation, which is not—if the only one that's not conceptual is the Lyndonville Project. So the reason I am down here tonight is in case there are any Lyndonville customers down here that might have any questions relative to the 115 kV substation that we are looking at putting and hopefully in the year 2010. And I also am on the VELCO Operating Committee so I like to show up and see what's going on at events such as this. So that's what my ties are to VELCO and why I'm here.

I'm Jim Ashley of Danville. I'm on the Danville Planning Commission. I also run a business: Green Mountain Geo-Thermo, LLC. I'm dealing with heat pumps and primarily for residential as a consultant and I have a number of issues or questions. One that there be adequate out-feed power, out-feed capacity, which is I think what Lyndonville Electric is doing for renewables as they come on-line and how they feed into things. Um, a number of other general questions, but particularly how the geothermal industry can assist the power companies by managing loads at critical times through say, heat storage or cool storage at the residents by building certain additional capacity or whatever. Um, and probably get feedback from the power company in terms of a different rate structure for the customer so that we can minimize peak load demands and have as efficient a system as we can in each case—again, to reduce the footprint.

Question 1

So the first question that we have for you folks this evening is based on what you've heard tonight, what is your impression of the analysis and the draft plan and what concerns do you have about the draft plan?

Well, I guess I would say that this is not the first time that I've seen the draft plan. I think the VELCO started their new planning criteria in 2006 and started going out identifying where the deficiencies were or where they thought they were in their system and the state of Vermont. And the one that I'm more familiar with is the St. Johnsbury Higgins Hill substation where they identified being only one power transformer and as a result if that transformer failed, then there would be reliability problems for all of its customers from anywhere from two to four days. So that was another one of the reasons we decided

to request a second substation and Lyndonville so that we could interconnect the two and use one to back up the other so that if a facility fails, the other substation can carry not only it, but also the substations that it's partnered with. So, I mean I know the other areas that have deficiencies, but the one I keyed in on more is the one closest to home today, which is the St. Johnsbury Lyndonville area.

Okay. Did you want to ask the second?

Question 2

Sure. The second question is um, what information would you like to share that you think planners need to know about—activities, plannings or policies that may influence projected electric demand—either decreases in demand or increases in demand?

Uh, Jim Ashley. I think I spoke to that to some degree already. As people switch off at what currently is about 78% fossil fuel usage to heat their homes into other forms of heating sources—they will hopefully get their homes far more efficient—that, uh, what effect is that going to be...some of it's going to be electrical use through heat pumps and so forth and how that's going to affect our electrical requirements.

Okay. I guess as a manager of a distribution utility I've been familiar for a number of years with the smaller windmill and photovoltaic systems that have gone on our utilities under net metering. Geothermal—to be honest with you—my knowledge about geothermal wouldn't fill a bottle cap so I really can't comment on that, but, you know, as far as what are my concerns as far as future loads of power supply, I mean there are a lot of issues out there. I don't know if I'm really... if this is the place to comment, but one that comes to mind to be right now that came out of the Legislature under House Bill 446, which is the energy bill, and if you follow that at all, you would see that I think they are coming up with kilowatt hour electrical subsidy rates of 20 cents for wind and 30 cents for photovoltaic. Lyndonville's current average retail rate is about 13-1/2 cents. So if they decided to shut everything down and sent nothing but that to Lyndonville, then I guess you can get a good idea of what our rates are going to do. So, you know...and I think they were talking about possibly up to 50 megawatts you know. And Vermont is 1,000 megawatt, plus or minus state. So, is this a stuff were supposed to be talking about or?

Uh-hmm. Absolutely.

And as far as alternatives, Lyndonville has tried to be in the forefront of getting a wind farm by way of a developer two years ago who took his project to the Public Service Board for four turbines or up to six megawatts, which was going to be used totally by Lyndonville. And this project was going to be on East Mountain and East Haven. That project was turned down because he did not do a bat and bird study. Okay? So, when you hear people say alternatives, renewables, we've got to have one—and as far as I'm concerned, that's probably one of the best sites in Vermont for a wind farm because it already has an old Air Force rusting radar base on top of it and if anything, it would have probably cleaned it up and made it look a little more respectable. It was turned down. I mean it just goes beyond me as to why it

was. The Vermont Public Power Supply Authority is taking a second look at it and it is made up of 13 municipal electric utilities of which Lyndonville is one. And right now we are looking at it and conceptually looking at possibly putting in up to 9 megawatts by way of 3 turbines there and interconnecting probably through Lyndonville Electric to the VELCO grid and instead of Lyndonville getting the entire project, we will only get our percentage of what VPPSA there is, which is 20% and the other 80% will go to the other 12 municipalities throughout the state of Vermont. So, you know, there are people out there trying to develop projects.

And that would be a transmission that relates to this because it's transmitting that power to the other...

That's right. The only way we can get it out would be to get it onto the VELCO grid and then it would go to the other utilities. So that's where we all are interconnected.

Do you cover Burke?

I cover Burke. Well, Lyndonville Electric covers Burke.

That's what I mean.

Yeah.

So, um, I just wondered.

I think I'd add a comment to that.

Sure. Uh, as an individual I'd certainly support what Ken was just talking about—about the East Mountain project. It ought to go forward.

I'm glad we have one supporter here.

We are neutral because of our own.

Well, that's what I was going to say. You're from Burke. I wasn't going to ask you what you thought.

I'm from Sutton.

Oh, from Sutton. Well, you are looking at the other project now. Hopefully you're not one of the Ridge Protectors? I won't ask you... I won't ask you that question.

I'm official. I wouldn't answer today right here so...

Well, we've asked our two questions and we've been around the table.

Yet is there anything else?

Is there anything else you think we should know or VELCO should know, you know, as they're looking at their transmission and meeting demands for electricity around the area?

Well, I think they know what their mission is and I think they know that unless we have a strong transmission system we don't have the system. And that's why we're here tonight.

Brattleboro, May 13, 2009

Individual 1

Just so you know that way we don't have to rely on my bad memory but we can have it here and I'm just going to put it here. So, yeah, I would love to get your impression here of what you saw and then also what you know that's going on locally that you think might influence projected demand or need or things that people are talking about that you think might affect the forecast. Because that's what I think the knowledge you might have that we don't have.

I don't have what I would call a lot of local knowledge of that sort. My impressions as to the meeting were fine. I think you did a nice job of the meeting and I like both presentations. People that you had here—I spoke both to Deena, I spoke to Kerick and Dana LaForest—they all have very knowledgeable... I had a couple of conversations. But every one of those I had an in-depth conversation with. I told all of them I thought my concern with the plan is its very deliberately narrow scope on reliability. There are other things that need to be considered in the transmission system and I talked about those to a number of these folks. It sounds like they are... they were deliberately encouraged to keep the plan scope quite narrow. Several of them had conversations with me about things other than load growth that required consideration of transmission system upgrades and they are not in the plan and I asked them very specifically, where are they being discussed if they aren't going to be discussed in the plan? So that, I think is my main concern with the plan—is it's very and deliberately narrow scope.

And it's a little troubling because I don't understand where some of the other considerations are getting covered.

And would you mind just telling me what the other considerations are?

Well, for instance, the re-licensing of Vermont Yankee is one—that's sort of the obvious one. The Hydro-Québec contract renewals. The fact that there is a lot more renewable energy—I guess on the Tug Hill Plateau or someplace in northern New York that there is not got a good way to get into this region at this point and the fact that Dean commented that the VELCO responsibilities are essentially lines and substations. But they also include—as he agreed—the control systems for the lines and substations. So there are upgrades clearly necessary to the control of the transmission grid that are very carefully not discussed in this plan. Part of that could be the national security concern issues. But I don't know that. And there's no forum where I'd see those being documented and discuss and that bothers me a bit.

Individual 2

...on Smart Grid. And so I really want to hear that at least in an introduction to the public that, although we were handing this report and we revise it—you know, every three years—what's been happening in the last two months is really pretty significant and we're paying attention to it. So I didn't hear that specifically, but Kerrick tried to convince me that um, there are a lot of progressive things being done in Vermont with optics and details which, you know, I don't know enough about to really talk about, but...

Actually, if you go online, we had a show on Smart Grid on Vermont Edition.

Recently?

Yeah. And you should check it out because it was pretty... I thought it was extremely interesting. We had him and we had the head of Vermont Electric Coop also who has installed smart grids.

Individual 3

All right. My name is Tim Arseneault—A R S E N E A U L T. I'm the Town Moderator and Board of Civil Authority Chair for the town of Vernon. From what I've heard about the plan tonight it sounds like you're taking the right approach and not discounting everything. I would encourage you to as strongly as possible both from a planning standard and from an environmental standard look at non-transmission alternatives as much as possible. Things such as efficiency—strengthening...as much as possibly can happen in the state. In addition, um, ideas like the synchronous condenser just put in by Central Vermont Public Service and VELCO in the town of Winhall are the right approach to maintain voltage stability along transmission lines. As far as looking at local issues, I would hope that future planning would take into account whether or not Vermont Yankee continues to operate past 2012 that that is the perfect spot for some sort of generating facility—to use the existing transmission lines and capacity as much as possible and making sure that future plans are cited and done so with a minimal environmental impact. Thank you.

Montpelier, May 19, 2009

Individual 1

My name is Barry Bernstein and I'm President of the Washington Electric Coop Board as I said to John. I have a few concerns about the report from just having a brief reading. One is the load growth. Is using traditional load growth in here? We've seen a lot of changes in the last 18 months. I think all of the utilities in the state are basically talking about flatter or negative growth and I'm a little disappointed and think the report needs to pick up on where we're going in terms of reality. And as part of that I also think it's VELCO and all the utilities' responsibility to start talking to Vermonters about not just meeting this future growth, but talking about how we have to constrain and restrained that growth. I mean on a national level, they've been talking about a 50% increase in demand in the next 20 years. Now they're down to 30%. I think we need some adjustment—a reality adjustment. You have a range in here of \$500

million to almost \$1 billion in costs that's obviously going to be affected what kind of renewables come in and what the demand load is and that's a big range of dollars. And with the pressure that we have on the economy and trying to find dollars, I think we've got to be really thinking about how much of those dollars are really going to be available in terms of when we translate that into residential rates. I mean, there is pressure to try to keep rates down and that's just a fallacy. And if we put these numbers out, the third point on that is, of course, like the Stowe project, we start out with one dollar figure and it's already twice that amount. I don't know what's going to happen with the numbers that are in this report. So, I have some other questions, but I just wanted to start with that. ???—I'll take the...you can take the specifics on that, but a couple of I think, overview remarks. We, like all of you, are Vermonters and are concerned about the rate pressures of the costs going forward. As far as the forecasting goes, there's no doubt this year we're seeing either flat or decreased load right now. The question is first of all, how long is that going to continue, when ??? I'd say a year or two ago people—well, not a year ago. Six months ago people were talking maybe five years. Now people are talking one year. Other people are talking two years. Who really knows? We have certain criteria that under ISO New England as part of the regional power pool, that we must plan right now. We also can use obviously some of our common sense within Vermont to take...

I think it's pretty much true of any forecast—it's pretty much almost impossible or—if history is a guide—a load forecast that goes 10 years out from now is not going to be right on. It's going to be more or less.

What we have to do, recognizing the magnitude of the dollars—I think there are the things, though, that are going to affect the load forecast. And Dean will talk more specifically about whether it should be flat, about whether it should be decreasing, etc. I think one of the economic development engines for Vermont going forward is we have to have reliable infrastructure. All right? It means just a ticket to the game for any new business coming here needs to be that they might stay on and more importantly, it seems nowadays is that people are connected with their Internet. I've talked to a number of utility executives when there's a blackout right now or any type of outage—you used to be able to get through it by bringing... by making sure people were safe if they had special medical needs, by getting ice out there, by getting candles out there, by getting flashlights and batteries, but it's unbelievable how alarmed and how much the public outrage happens now when they lose their communication. All right? A lot of people are switching over to voice over Internet. A lot of people rely upon their Internet either for business or for home. So on the lights go out the utilities are hearing more—get my Internet back up. That's more what they're concerned about than the lights, okay? The other thing is with technology coming the question is will electric vehicles, for example? If electric vehicles come, you're talking about a whole different ballgame with the amount of electricity that's going to be consumed. I really think as a nationwide effort towards electricity being the fuel supply of first choice for right now. That means because electricity can be made—whether it's cow power, wind power, renewable energy, Hydro—Vermont enjoys the lowest carbon footprint of any state right now and we're proud of that. So, I think the important thing is that we make sure we plan ahead and we don't plan too aggressively, but as you all know, the amount of time it takes to site, permit and construct and plan for any significant power

upgrade takes a number of years—anywhere from five years or so. So we just have to make sure we don't get behind. If you look at Dean's list up there are a number of projects that we identified in 2006 that still aren't built. All right? We can keep refining our crystal ball as we go, but a lot of the projects on here aren't ready to go tomorrow obviously. So the idea is, as the planning horizon comes in closer that we make sure we factor in the types of things that we saw with the economic downturn lately. And the other thing that I think—statewide—that I think we have a great opportunity for—is really for the smart grid and for technologies that will enable all Vermonters to use their electricity more sensibly. All right? So if people really know what they are using—have either choices over the type of electricity, choices of the time of day when they use that electricity, know price points coming back in, there are more automated switches out there to improve reliability and a lot more information back to the utilities and the transmission company to help shave peaks and help us get through the times when the electric system is taxed the most would be of a great help. And lastly Barry, the one other question you asked was, um, we obviously can't be estimating projects at one price and delivering them at another. I'm very proud that we were asked by ISO New England to work with the whole region on how are we going to make sure that the estimates that come out match the actual prices that it takes to construct these projects. If you look at our most recent projects, East Avenue and Lamoille County—the number that we said, you know, two years ago or a year ago—those projects are on track right now and doing very well. There's always pressure any time you build a project for some of the unknowns out there. But more importantly on a regional basis VELCO developed and we've been working with all the six TO's throughout New England, and all the ??? layers on a process by which we estimate the project track the project, have transparent report outs and actually deliver the projects of the price we said we were going to build them for. All right? More like a developer who goes to the bank and has to deliver for that price. All right? And you'll see that in the future all of us had to go through learning some of the projects were the first major projects that all of us had done collectively. In 30 years we've developed a very good team at VELCO. We've got a lot of input from everybody in this room and the projects will be delivered a lot closer to the estimate now. All right? So that's Vermont region-wide because Vermont pays four cents on every project has developed in New England as well right now. So it's important that we help the other TOs get their costs under control. Because even four cents on the dollar on these big projects is a lot of money for everybody. So we need to work very hard on that as well. So I think I hit the high ones. Dean, you can talk about forecasting and what we're going to do in the future or in the short...

I brought back up on the screen the forecast graph if you will. This forecast was put together basically in May and June of last year. So it was before the most dire of the dire predictions. It was with an entity, a firm called Itron that's actually done forecasting for a number of other Vermont entities. And the way we did our work we tied the need for upgrades not to a specific year based on the forecast, but we tied it to a specific load level. So for example, three months, six months nine months down the road, you get better information and to find out that—and I'll actually come to the point—your forecast was low or your forecast was high. If we predicted and tagged a specific need to a load level—as long as we don't spatially change how load is distributed around the state—we have a reasonably accurate predictor in terms of when need exists. So if the economic times that are facing us right now basically cap load at the

value for '08, '09 and 2010 that we can use this data. Say, essentially if we need everything two years later—less need in the future—that work is already here in the can. And the reality is—and maybe it wasn't clear—this is the first step of the planning process. By putting out this report we're receiving no permission to go construct anything. We actually have two permitting paths that we have to follow and go to completion on before we can actually construct anything. There is a state funding process that Ms. Frankel sitting in the back can talk to you more about at her table and there is a regional planning process. And in both of those we'll actually have to do work that says we looked at the most recent up to date forecasts to justify that project. So, this forecast is what we had at the time. We had to proceed with this work because there was probably nine—forgive my figure of speech—man month's worth of work in creating this report. We can't wait to... three weeks before we have to create the draft report to get the latest forecast. Because there's a lot of work that has to be done and put together. The technical work that then forms the basis for the summer report that you have. We tried to do it in a fashion so that it actually has use and value as you go out in time. Um, I'll admit that since that time I know that there's been a stakeholder reference in the region as a whole and ISO has actually updated their forecast twice and revised it down. We'll have to use those latest forecast for our planning work to justify any one of these projects. On the flip side—and that's one of the reasons why I brought this graph up—the last economic recession, which may not compare to today's that we had was back in the early 2000s and I'll actually walk over. The summers of 2001 and 2002—those were the last recessions that we had—we had all-time summer peaks both of those years in succession. So what may be happening on the energy side of the business may be one thing but we have yet to see for hot summer days what will happen with the peak demand. And unfortunately, with the rules of the road the way they are that's what we have to design to. So, that story is yet to be told. We'll see it this summer.

Group 1

Question 1

So here's the drill. We're going to just go around and introduce ourselves so you all know who's at the table. Oh—absolutely, please come join Dotty. Um, and then I basically have two questions for you. One is, you know, based on what you heard—either in the presentation or in the conversation you've had, what your impressions are right now, understanding that there was a lot of information. So were not expecting you to have formal comment, but possibly some impressions of what you've heard. And the second question would be what you might know that's going on in the community that you think VELCO ought to be aware of as it begins thinking about future projections. Okay? So to just start I'll just model the introductions. My name is Heidi Klein. I work at the Snelling Center and I'm here today as one of the hosts.

Kate Rayder, League of Women Voters.

My name is Paul Markowitz with Sierra Club.

Hi. I'm Bruce ??? Just a private but interested citizen from Montpelier.

Nancy Nodderman from Hardwick and I'm Coordinator of the Hardwick Energy Committee as well as the Town Energy Officer and other things.

A 4-week old, 10 kW wind turbine...

My name is Alan Converse from Norwich, Vermont. I'm an interested citizen and I'm quite interested in renewable energy options.

Dotty, did you want to introduce yourself?

Sure. I'm Dotty Schnure with Green Mountain Power.

I'm Deena Frankel with VELCO.

I'm Richard Suitor and I'm here with a bunch of hats. I used to be on the governing committee of the Northfield Electric. I now live in Winooski, but I attended some of the VSPC meetings that formerly looked at this presentation.

This is Barry...my name is Barry Bernstein. I live in East Calais, Vermont. I'm President of the Board of the Washington Electric Coop.

Hi. I'm Steve Litkovitz. I'm electrical engineer with the Department of Public Service.

Hey Steve. All right. So, um, what I'm... I'm going to put this here for now and you could let me know if you're interested in sharing any thoughts or concerns that you have, questions that you may have. We have folks from VELCO, from the Public Service Department, from GMP who are here primarily as listeners, but if you still have a clarifying question they'd be glad to answer. Mainly this portion of the agenda we were really hoping to hear from you. You know, what your impressions were from what you've learned. And then the second question is what... if you have any questions...um, any information about what's happening locally but you might want to share. So those would be the two questions. Did anybody want to start?

Well, for me most of the presentation was new information to me so I don't particularly have some questions about that. But I do have a couple of questions relating to the re-licensing of Vermont Yankee and one question is what the...what VELCO is doing to take care of the possibility that in 2012 Vermont Yankee might shut down. So, where do we get our electricity—the 30 some percent that we get from Vermont Yankee—where is that going to come from and is the transmission... what's the impact on the transmission system because the power that we do get to replace it would be maybe increased power from Hydro-Québec or other sources. So it sounds as though we might need a somewhat different transmission system to take that into account. And also, I did get the impression, perhaps wrong, that not a lot of specific consideration was given to that possibility. In other words, if you're going to have to do significant changes to the transmission system you really should have started three or four years ago. So basically the question boils down to what if Vermont Yankee stops at 2012 and what's VELCO doing about it?

Do you want to have an answer for that right now or do you want to have that is just part of the record?

Well, if you have an answer now, I'd love it.

My suggestion is that we hold that question. I think we've got a couple of people who are really experts that can come to the table and answer it as we get to the end of this process—if that would be okay with you.

Sure. This is Paul Markowitz again. It's funny. You want to look at this thing. It's like—hi, how are you? How about if I just put it right there.

Yeah. It's very sensitive so you don't even have to pay attention.

There are two. One is substance. One is process. Um, on substance, kind of—I don't know this gentleman's name, but...

Bruce.

Bruce. Um, I just saw this document today but it seems to me it would be valuable if there was more like scenario planning. The scenario planning being if this happens, we do this. If this happens, then this means maybe 3, 4 or 5 different scenarios. And one of the scenarios I would like to see—what happens if Vermont gets, you know, 60% of its energy from locally distributed renewable resources in the next 10 years? 15 years? What are the implications on our transmission system? It's certainly going to be a lot different than if we have to continue importing from Hydro-Québec or the Midwest. So I think it would be a much more useful document if it looked at those kinds of scenarios and then as a scenario unfolded, say, oh, it looks like wow—this scenario is unfolding. We have to move in this direction and that means upgrading here or etc., so that would be the... my first on the substance side. On the process side, just a couple of things for the future to note. Maybe I missed it, but was this sent to us in advance? Or was anything sent to us? So it would have been valuable for people because I think I signed up—to have—because this is my first look at it so it's hard to react to something here. That would be the first one. And the other piece would be um, yeah—I mean I understand that this is...this is our time to kind of like get reactions, but it's hard to have reactions in that time frame that we haven't had time to digest it, etc. That it's really an engagement back and forth so that this gentleman can have his question answered and it's maybe several small group sessions. Break back. Come back, so...but that would be it.

Thank you. Anybody else who would like to offer their observations or...?

Yeah. I just want to look at my notes here first. Okay. This is Barry Bernstein began. First of all, I thought Paul's point about process was extremely...the what-if scenarios because I was one of the things that stuck up here—stuck out when I read the report was that there was...it did not assume Yankee being down in 2012. And I think that it's quite frankly a major flaw given that its license is ending. So I like the what-if. As I mentioned when I asked the question before we got into this, another what-if in terms of what happens if our peak isn't at 1.1% per year? How does that change some of scenarios and I have a more generic question. Is what is VELCO's responsibility and all the distribution, uh, utilities to be

starting to talk to people about the cost of trying to meet a demand that's not necessarily real. And if it is real and it may cost us more to meet than we actually have funds to do everything. I mean we see nationally we've got, you know, trillions of dollars worth of need and you know, it's only coming from printing money so I did have a question about the performance issues. What's helpful for the explanation that was given earlier but the range of a half a billion to a billion dollars is quite a bit of money and therefore, it would have been helpful in the report of kind of showing what that spread was. The plan didn't include... included the mention of what impact of new renewables the state will have on costs or—either up or down. What does any individualized, local development like the Stowe project or the one they're talking about over in the Lyndonville area. I guess that's...where is that?

Is it Lyndonville? It's not Lyndonville.

Sheffield?

No. No. The development of the new multi-...you know, thousand condos. You know, it's over by Burke. What does each one of those developments cost in terms of stress on the system and what we have to do? We need to be, you know, we need to be just not talking about how to meet it but also talk about can we handle the impact of different sizes? Just a second. I'll hold on that one and I'll come back if I have another thought.

This is Al Converse. In the discussions at the various tables I was impressed with the general knowledge about possible future developments. That is, the degree to which electric heating might reemerge perhaps in the form of heat pumps. The degree to which electric transportation might increase, etc. but I didn't see evidence of that type of thinking that I can recall in the plan. And I don't think it was in the presentation of the plan. Of course, I'm just speaking from having read it on the Internet and I don't read very carefully on the Internet. But I think this element may become important in the future so I guess I'm also saying a little more what-if type of analysis. I also was impressed that the plan was very responsible in the sense that it focused on stuff that has to be done or to the best of their ability to meet the requirements that are imposed upon them by the central government. So it was sensible. It wasn't...but it wasn't as far into the future as I might have expected. I also asked the degree to which the transmission system was compatible with a large amount of commercial wind power in Vermont. And I think I learned that it's not very well situated. And I didn't learn that from the plan. I didn't learn the opposite from the plan either. I mean, the plan didn't address that question as I recall. But I think those are important things that...of the future in that there is some consideration. So I think maybe there should be sort of two... and there probably are different levels of planning—one that meets the federal government's requirements for reliability and one that meets our concerns of what the future might be. And as long as I'm going on, when I asked about what happens if these two big entities—that is, Vermont Yankee or Hydro-Québec—work to be shifted out, I got the impression that it was not expected that it would affect the transmission very much because Vermont Yankee would have to be replaced by something coming in from the south—although it might have been replaced from Hydro-Québec. But that assumption said that it wouldn't make any difference and so I think that was important to learn.

Okay. Thank you. Anybody else want to share their impressions? Just so you know, the public comment period—because we know it's a lot to digest in one reading and some conversations will be open online until May 25 in terms of as you digest more what they're written information is. That would be useful because I'm hearing that around the table.

That's one week from today.

A week from today.

It will take me that long to get my dial up going!

[Laughter.]

It'll crash your system for sure!

Right. Um, go ahead.

Okay. Nancy Nauderman. And, um, well, my big thing is renewables and how that's got to be dealt with and I also see looking at planning. I think he and I don't know if I missed anybody—were there just to people that got up and talked? Because I came in late. Now everyone knows I was late. But planning 10 and 20 years down the line I totally agree with what you're saying scenarios. You've got to have the scenarios set up. And I'm talking the Public Service Board—everybody. VELCO. So that when those things happen you can move because you can't then—oh gosh. Now we've got to figure out how to do this. You've got to have figured it out and have it ready to go just the same way, um, with a lot of other things with our government that um, more planning and really looking at innovative things and innovative ways of doing things and I really, sincerely believe that there's going to be a lot more localized production of power and...all over the state. And I gather I learned that the transmission lines...correct me if I'm wrong—are not set up to take you know, a load and let's say totally deal with that. So I guess those are my thoughts.

On the [loud noise] you segued really nicely to sort of the other part of the question which is what is it that you think might change that, as Dean presented, you know, the forecasting is based on a set of assumptions and it's based on... if I understand correctly...what will happen—what would be projected to happen if we don't make changes? And you're speaking to some change that you think might be coming in terms of local energy production, but are there other things that are happening that you're aware of in your community, in your town, or perhaps statewide that you think VELCO and planners ought to be aware of in thinking about what changes there might be to anticipate or happenings that might affect projected load and demand? Anybody have anything that hasn't been said?

I do want to make one other comment. Okay. It's Barry Bernstein again. Just in the what ifs, in terms of energy efficiency, it would be nice if this report actually said that if our energy efficiency increased by 10%, we would be able to avoid A, B & C or that if it increased in this area or that area or we need to actually try to model and meet this goal in Chittenden County because otherwise we're going to have to do a further upgrade. And I think that if we had been doing this—and it's not VELCO—it's all of us—if we

had been doing this 5 years earlier as opposed to somebody being in opposition and, you know, if that what-if had been done we would have been more prepared to do some things. But it's definitely coming and I think the other question that needs to get talked about—and I don't know if this is us as distribution utilities or in concert with VELCO—is to talk to people about, you know, you put 50,000 plasma TV's on-line, it's going to mean that you're going to have this line going in front of your house. We're happy to do it. We have an obligation to do it but it's connected with your buying pattern. And most people do not know the difference between a 50 inch or—I mean, I don't even know what all these terms are either because I don't have a TV. But that would help a lot if people decided to go that path. But anyway, I'm just... I think that's... there should be a section in this report dealing with some of those implications.

I'll go back again. Um, Nancy Nauderman again. Just efficiency I think is the huge thing that I'm guessing didn't get addressed in here very much. Correct? And I think that's the huge thing that's going to be happening because Paul and I work with energy committees and there is an awakening. People are...real...#1 they're realizing the impacts of their energy use. #2 our economy is in such bad shape—people are realizing they have to do efficient measures to keep their budget... their home budget under control. And I just think that's going to be a huge part of this—so that projections to need to keep that in mind.

Um, Paul Markowitz again. Um, a couple of more things of added emphasis. First I wanted to... I forgot to start off my last comments with applauding the general direction of this effort that, you know, I think VELCO saw what happened with the power line up in the Chittenden/Addison County corridor. What was that line called?

The Northwest Reliability.

That line, yeah. So I think the effort of trying to engage stakeholders and getting them in the process and saying okay, folks, what you want? Where should we go? I think that's the right direction to go and I really applaud that general effort and I think that it should also happen on a broader scale—not just on transmission because you can't just look at transmission in isolation. It has to be transmission, generation and efficiency and that process should be replicated on a broader scale and a discussion about transmission done on that context. So that's one comment. Um, on efficiency—and I saw the NTA, which is...I'm in the energy world and is the first time I've heard that expression but maybe I'm out of that loop. Uh, non-transmission alternatives. I think that's a great focus and I would love to see particular attention given to load shedding, particularly around summer peaking and winter peaking. What causes those peaks at four or five o'clock on an August day? You know, air conditioning. What causes those peaks, you know, at five o'clock in the afternoon on a January day and let's use that Smart Grid technology or like they used to, you know, 20 or 30 years ago turn off those heaters for those units when you hit those peaking and say, what did you... are you willing to shed your air conditioning for two hours a day and we'll give you a financial incentive? Meanwhile, we don't have to buy into that 50 cents a kilowatt hour, you know, gas-fired generation down in Rhode Island that's really expensive and drives our rates up. So, I think... I would love to see some emphasis pushing the envelope—what does it mean,

you know, like I agree with Barry that...to...we've got one of the best efficiency utilities—one of the few—but one of the best efficiency efforts in the country with Efficiency Vermont. Let's do more of this geo-targeted effort. Let's do more of these efforts where we are pushing the envelope. What are our customers willing to do? What are they willing to, you know, changes in their behavior or changes in their lifestyle and commensurate you know, a financial incentive or reduction in their rates. So I'd love to see some more pushing along that line. Can I do one more? I don't want to dominate the conversation here.

Just a last one in terms of the public process that I want to...um, I don't... this is the first time I've had a chance to plug into this process. I don't know what was done early on and if there was or if there was—I apologize. But just in terms of when I think of collaborative and involved process, what would be great would be to solicit public input before a draft plan was done. Maybe it was done. Maybe I'm just... I don't know—to solicit at the very early stage—hi folks. We're thinking about doing our 10 year or 20 year plan and what do you think? And the problem with this issue—transmission planning—or transmission lines—it's like—it's really hard to relate to people, you know? Vermont Yankee: people can relate to that. Wind power. But I think transmission lines—unless you've got one running next to your house—it's hard for people to relate to. So I think we have to be creative in how you relate this issue back to people and I think that's one. The second one is public forums are great but it's a very limited way of reaching out to the public. You know, you have to have those people who are motivated like us here for whatever reason that brought us here today. Maybe it was the food. I didn't even know about the food but...it would be creative ways in terms of how you reach people. And you have to go to people rather than expecting them to come to you. And when I say created it's—you know, would you be willing...you know, it's relate to a personal level—you know, imagine that utility rates are going to go up. Would you be willing to take—for \$20 a month reduction in your utility bill—have your air conditioning shut off on demand? Something... so it has to be on a very personal basis for relating it to, you know, those appliances that you use cause X demand and if we didn't have that... so I just think it's a very challenging topic and it has to be created in terms of how we relate it to the individual to make it real to them. So thanks for your time on that.

Thank you. Anybody else have any additional comments—thoughts about what's happening locally that might change? We've heard about ways that efficiency might lower... is there anything that you think is going to increase electrical demand or shall we say thank you very much for coming?

I was going to say one thing just because I've got to follow up on Paul's. That's the thing about smart meters and smart grid. A lot of people think that that's going to be the answer to everything and I had a conversation with somebody not too long ago who said, you know, this sounds like the deregulation panacea—that it's going to be the answer to everything. Everybody jumped on the wagon on that. There were very few people actually spoke out against that and this state would have been in really deep trouble if we had followed the trend of what happened in California and Massachusetts and others. I'm not opposed to smart metering. But one has to see—I've only been in this state 40 years and I've found it that Vermonters don't necessarily have to get paid for everything to make them switch. They do heed information available to them. I've had this conversation. We used to do radio ads around the state that

said, will you please watch your usage these... at this time period? If you can flick off your air conditioning for an hour or two—we'd just assume people aren't going to respond to that. And I think that's a mistake and it doesn't mean—what I was talking to John that smart metering won't happen at the substations because it's probably the first and best place to do it in the transmission grid and there are some places that it's definitely going to be a wonderful thing to do, but when you have Vermonters who are using five to six to 700 kilowatt hours, you're not going to be able to get a lot of people to be able to make the kind of shifts that people think about. So I think we need to combine that good Vermont way of thinking along with technology because it doesn't always buy us what we think we're going to get.

Following up with what Paul was saying, I'm hoping everybody understands what he means by go to. It means go to a group that's already formed and that means not—don't take this the wrong way—but not a slick P.R. person, but somebody who's down to earth, understands the issues and can talk to—I don't know, the Rotary club, the Cub Scouts, the...whoever on a good human level. And the second thing is with the kind of work that I'm doing I know I have a lot of facts, but just some of the things we talked about, it would be good to have the actual dollars of...it's costing... if you were to shut your air conditioner off for two hours or you know, turn this off or exactly what does this TV... what are the real costs? Getting those numbers and how that's really affecting their bills. I think maybe that information is there, but when people see it in their pocketbook, they get the message.

Uh, in the 1970s I think I was associated with a study that sort of indicated that we could put information on the power grid. And we could therefore, control usage of the power in individual homes and factories, etc. by this means. It was an early version I guess of the idea of a smart grid. And then you could—if you wanted to elect to buy power that could be shut off for your air conditioner, etc., if you had a smart enough meter—all that could be done and I really like the idea of being able to sign up to have my power shut off rather than having to remember to do it at the proper time and do it every day—if they could just take it off at the right time. So I didn't think... that didn't work out I guess because we didn't do it. But I formed the impression that we have a long tradition of selling this interruptible service to the general consumer. Now, we have some people around the table that can show me I'm wrong if that's the case, but I think that rather than counting on the good Vermont are too much, we ought to give him an interruptible service. And if this...if this smart grid isn't something that we just talk about, we ought to be able to provide that interruptible service and they should have a big impact on the system, too.

Thank you. I want to recognize that we've gone a little bit beyond time and I appreciate that you've all stayed. I don't know if there are any other comments that we want to come back to. Bruce? I know, Deena, we promised that we would get an answer to your question about the...how Vermont Yankee's continuation or not factors in. Would this be the right time to do that?

I'll try to answer succinctly. I recognize at least two faces who I've told this to so hopefully I'll say this the right way. One of the major things that we do look at and actually did look at in the work for this plan is—um, and I apologize for the euphemism—the consequences of facilities that can be out for a long

period of time. We have pieces of the transmission system that can fail and it takes a year or two to replace them. Something can happen with respect to a generator. Any generator: Vermont Yankee, McNeal, Hydro power plant—they have large mechanical devices—they can have catastrophic failures and they can be gone for 12 months, 18 months, 24 months. So it just so happens two of the long-term outages we examined were loss of the Vermont Yankee power plant and also loss of—not necessarily the energy contract from Québec—but the facility in northwestern Vermont that connects northern Vermont with Québec and imports much of the energy contract on a daily basis. And there's basically two different answers depending on what you're talking about and I want to be specific. Vermont Yankee, in terms of the transmission infrastructure in the state of Vermont, if it were gone tomorrow, it doesn't really affect hardly at all in terms of what we would have to build and maintain and design in the state of Vermont. Because of where it is electrically, it looks and feels a lot like any other generator in New England. It's in the southeastern corner of the state. We have transmission connected to the rest of the state. If it were retired or if it went away and we examined it, we don't have to change the infrastructure that we have in the state of Vermont to meet its needs. That's one answer. Um, the other answer is a little more complicated.

But, are we on the assumption that the power group to replace Vermont Yankee would be coming in basically into that tie-in in southern Vermont?

That is correct. That's how we started it.

Are there other places that might have a big impact?

That is a very fair point. Um, I guess that's the other part of the coin that I have to describe. The presumption was that when that power plant went away, the power was made up from sources outside the state of Vermont. We did not pick one or two or three other sites where that power supply was made up within the state. So in that scenario Vermont Yankee went away and the power to replace it was made up outside of the state. We did not have to add any other transmission facilities. And your point is very well made. If it were made up in state by one or two or three point sources—the outcome of that answer would be depended on where it you propose to it and potentially the size of those sources. And we haven't done that work so unfortunately I can't give that answer. Um, the... just Vermont Yankee, you wanted to know? I don't want to go further than I need to.

Yeah. That's—well, Hydro Québec would be interesting, too.

Hydro-Québec is a little more complicated. You want to... it will take a couple more sentences to describe that one. Um, Hydro-Québec we have... there are two parts that play a role in terms of transmission in the state of Vermont. There's a contract—so there is a contract between the Vermont distribution utilities to get energy from Hydro-Québec and then there are facilities, both in Vermont and outside of Vermont that connect the Québec system to Vermont or New England that allow the energy to come into the northeastern United States. What we analyzed wasn't necessarily a cessation of the contract. What we analyzed was this device—call it a black box because if I say anything more it's a lot more sentences—but a device in northwestern Vermont that VELCO owns and... excuse me, the owners

of the contract own—and we operate and maintain—that provides a majority of that energy on a daily basis. And what we modeled with that device not being there anymore. There are a lot of ways that that could happen. There is 20-year old equipment in there that could fail tomorrow. Hopefully it won't happen. When that contract goes away, there may be a decision not to renew or maintain that device. That's a yes or no decision to be made in awhile. What we looked at was if that injection goes away, that injection looks and feels like a power plant in northwestern Vermont. It's actually in a reasonably good space. A reasonably good location. It's close to the largest city and the largest ??? load in the state. If it goes away that one does change the timing of transmission needs. And specifically the one significant... the most significant piece of new transmission we talked about—that line that's just north of Burlington that kind of goes east to west across Lake Champlain—if that type of injection, that magnitude goes away—the timing you need for that piece of transmission moves up in time. So it moves from that second decade that I talked about into that first decade. And again, the presumption is—and you brought up a good point—but that power, is that injection is not made up locally, but it's made up outside the state's borders, that's the outcome. If it were made up inside the state's borders, it's going to depend where it's made up and we, unfortunately, haven't looked at all those myriad of possibilities because there are a lot of possibilities.

Can I ask a question about the scenario plan?

Sure. The other thing is I want to release people if they have other place to go. Nancy says would you mind Paul if I let you ask that individually and perhaps I can ask John—do you want to just send people off on their merry way as an official closing?

Looks like everybody's ready. This has been very valuable to all of us. I hear a lot of good questions that are on the same line that Dean and the rest of us wrestle with. What we're trying to do is make sure that the infrastructure that does get built—whether it's a transmission line or something else—is thoroughly analyzed. All of the options are looked at and like I said before, the beliefs and desires of Vermonters are factored into what is ultimately built. And at the end of the day hopefully we do everything we can to minimize the impact overall. And that's really what we're trying to do. To keep the lights on. Give Vermonters options and analyze the impact overall. So I appreciate everybody being here today. I thought it was very valuable and this kind of dialogue—you know, if we could do more and more of it—we always use within the bunker—within VELCO—the team always make the better decision than an individual. I mean, that's very true with what we're doing today. All right. No one person is the smartest person in the room. If you put your heads together you always come up with a better solution. So... thank you everybody and safe driving please.

Okay. Great. And so, um, the VELCO staff would be happy to stay for a few more minutes if anybody wants to follow up individually, but we'll close the official part. Okay. Thank you so much.