

Attachment 2: Public Comments on the Public Review Draft

Attachment 2 contains public comments on the 2009 Vermont Long-Range Transmission Plan – Public Review Draft. Comments of the Vermont System Planning Committee appear in Attachment 1.

Section A contains comments of participants in the six public outreach meetings held around Vermont between April 27 and May 18, 2009. These comments were transcribed from recordings made at the public meetings. The comments were then subjected to minor editing to correct transcription errors and improve readability by removing extraneous material. Comments have been sorted into three categories: (1) comments about the content of the plan; (2) information about local communities and projects happening at the local level; and (3) comments about the outreach process.

Section B contains comments received by mail, email and via the public outreach website.

Section A: Public Comments Received at Public Forums

Comments about the content of the plan

1. 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.
2. Plan appears to say that large-scale transmission needs are mostly met for the next 20 years, in contrast to what we have been through in the last 8 or 10.
3. Are the demands of large users who are expanding their demand [such as Stowe Mountain resort in the Lamoille project] being taken into account in the planning process so costs are properly allocated? ... Are we seeing the right distribution of costs for those large users?
4. As a result of the Stowe project, the utilities have clarified how to apply the Vermont Transmission Agreement, and have laid the foundation to better deal with cost allocation, including for projects paid entirely in Vermont. The plan doesn't address this but there is a now a process when each project gets to the cost allocation step. 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 ...
5. 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 ... coming down the road pretty quick. That it has to be dealt with but if you can give me some greater comfort here? ... 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. 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. 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.

6. Rate impacts: You have a range in here of 500 million to almost \$1 billion that's obviously going to be affected what kind of renewables come in and what the demand is and that's a big range of dollars. 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 when we translate that into residential rates. There is pressure to try to keep rates down and that's just a fallacy. ... 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.
7. 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. It would be great if the country could be energy independent. But of course, that's going to take a lot more. Again, VELCO doesn't really care power is either coming in or going out of the grid. As far as VELCO's point of termination is concerned it's two-way. It doesn't really care.
8. In 1976 I moved from Rutland to Proctor and at that time in 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. From \$8 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... has been one of those communities where an awful lot is done locally and the sense of community is very strong. 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... 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 West Rutland or between us and Rutland that that power could — as much of it as possible — stay locally... 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.
9. 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... 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. There would probably be no access [to the grid but] 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 Con-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.

10. It's [reliability is] 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 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.
11. Well, by definition every — virtually every business in Vermont is small. But if you look at ... the makeup of our organization ... it's very diverse ... 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 ... 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 ... 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... 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. About 1200 [employees] ... 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 their lives, you know? If we were to lose those 1200 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 Genex 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 dream liner. So we're very lucky. 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... 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.

12. I think the question of economic transmission should be addressed. 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 ... something we need to pay attention to and it could impact communities far as transmission infrastructure.
13. In terms of “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 five years earlier ... we

would have been more prepared to do some things. 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 ... its connected with your buying pattern. I think there should be a section in this report dealing with some of those implications.

14. I'm in the energy world and is the first time I've heard that expression [NTA] but maybe I'm out of that loop. 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? Air conditioning. What causes those peaks at five o'clock in the afternoon on a January day. Let's use that Smart Grid technology or, like they used to 20 or 30 years ago, turn off the heaters for those units when you hit those peaks. 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 gas-fired generation down in Rhode Island that's really expensive and drives our rates up. I would love to see some emphasis on pushing the envelope. 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 changes in their behavior or changes in their lifestyle are they willing to make with commensurate financial incentive or reduction in their rates? So I'd love to see some more pushing along that line.
15. 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 ... 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.
16. Energy efficiency I think is the huge thing that I'm guessing didn't get addressed in here very much. 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 realizing the impacts of their energy use and our economy is in such bad shape people are realizing they have to do efficient measures to keep 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.
17. 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. 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. 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.

18. With regard to capacity needs, the plan assumes the worst-case scenario, the highest demand trend. The plan should provide some guidance back to the utilities and incorporate how that worst-case scenario can be mitigated to avoid a need for some of these upgrades.
19. Plan assumes summer peak load exceeds winter peak load. Hopefully focus of Efficiency Vermont's will lessen summer demand. This should be taken into account. Also consider how the trend of increased home size is starting to reverse. Watch these trends
20. The plan assumes a 1.1 annual percentage rate of growth. This may or may not be accurate, depending upon what we do.
21. I was questioning the 1.1% rate of growth and how accurate it will be into the future.
22. It is 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. Take into account the substantial efforts at the local and regional levels to limit growth in energy usage or actually achieve reductions. This concept does not appear to be in the plan.
23. VELCO 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 to help with some of the projection information, so I think that's a great way to approach it.
24. We won't have enough information by the time this plan is released about how some of the investments in demand-side management that will be coming out of the federal stimulus bill will potentially provide some new alternatives. I think that needs to be watched closely. The plan could speak to the federal stimulus bill funds for energy efficiency in terms of a trend that needs to be addressed.
25. The advent of local energy committees provides an opportunity at the community level... having people focus on demand-side management more intensively. Local distribution companies can work with the energy committees to understand their impacts on demand-side management that can be communicated back to VELCO.
26. Look at transportation. With more electric hybrid cars coming on, develop an understanding the capacity of the trend, what the need is going to be on the distribution side, and what kind of capacity and how this system of energy demand might be different than others. Probably not on the immediate 20-year time horizon, but it is starting to emerge in terms of the total energy picture. Transportation is about 45% of the energy usage pie. If we start to see some transference over to utilization of electric energy for transportation that might make a difference. ... There is a trolley car study going on in Burlington, but you know, I don't think it'll be like a huge electric demand or anything like that.

27. What happens if our peak isn't at 1.1% per year? How does that change some of scenarios? What is VELCO's responsibility, and all the distribution utilities, to starting to talk to people about the cost of trying to meet a demand that's not necessarily real. If it is real, it may cost us more to meet than we actually have funds to do. We see nationally trillions of dollars worth of need and it's only coming from printing money, so I did have a question about the performance issues ... 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 to show what that spread was.
28. What is the impact of any individualized, local development like the Stowe project or the one they're talking about over in the Lyndonville/Burke area, a thousand condos. What does each one of those developments cost in terms of stress on the system and what we have to do? We need not just be talking about how to meet it but also talk about can we handle the impact of different sizes.
29. 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.
30. [One concern about the report] is the load growth. Is it 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 were 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 ... a reality adjustment.
31. There is not a significant change right now happening in our [Rutland County] 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, 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.
32. This is one that I hope goes away real fast. I heard something on the radio that use of landfills has 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 ... 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.

33. 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 graphs 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. 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.
34. Plug-in hybrids moving closer to reality. The implications could be fairly substantial. It will be important for electric companies to ensure charging off-peak. Increased peak demands from hybrids could have a substantial load factor on the VELCO's lines.
35. Consider other generating facility there (at VY site) to use the existing transmission lines and capacity as much as possible and making sure that future plans are sited and done so with a minimal environmental impact.
36. 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 ... they want to know what their source of power can be and obviously what its price will be ... you know, we have some of the lowest rates in New England, but if they're coming from Utah...
37. 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. 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. 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.
38. 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. 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. Yeah. Well, let's not go out and generate all of our power from coal. Because we are going to pay through the nose for 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. You can't win.

39. [The value of this process is to answer the following question] On demand side 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 transmission expansion or the substation expansion.
40. Concerned whether there is a level playing field for all possible alternatives to transmission. Funding is readily available for transmission but the same level of certainty is not available for Efficiency Vermont and energy efficiency. Energy efficiency should have a level playing field.
41. VELCO taking the right approach by not rejecting any approach. Consider alternatives to transmission wherever possible, both for planning and environmental reasons. Example of the Southern Loop Synchronous Condenser is the right approach. Efficiency also, strengthening as much as possibly can happen in the state.
42. 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.
43. 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. I 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 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.

44. Plan narrowly focused on reliability. Should consider issues other than load growth. Where will these other issues be addressed if not here?
45. The plan should take into account changes in areas like Vermont Yankee and Hydro-Quebec contract, and the addition of renewable energy. They are not addressed in the plan, but there is no other forum.
46. Take into account whether or not Vermont Yankee continues to operate past 2012.
47. Wanted to hear the message that, although the report is revised frequently, we know much has happened recently [with Smart Grid and other issues] and we are paying attention.
48. I just saw this document today but it seems to me it would be valuable if there was more like scenario planning: if this happens, we do this ... maybe three, four or five different scenarios. And one of the scenarios I would like to see what happens if Vermont gets 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. I think it would be a much more useful document if it looked at those kinds of scenarios.
49. I do have a couple of questions relating to the re-licensing of Vermont Yankee: 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 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. 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?
50. 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 hydro and a mix of renewables. Economic, as well as environmental in our opinion. So, we expect that to be dealt with next year, but we would have liked to see it be dealt with this year.
51. 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?

52. ... 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 were 23 ... projects identified and half of which are sort of necessary now, as I just heard and the other half into the future. We [Rutland Economic Development Corporatio] were proponents of the Northwest Reliability Initiative... So I did speak at most of the public hearings on the [NRP]. 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 ... 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. Very specifically locally, we had two storms basically. Now those were different then 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 figured out how we can get power to the biggest groups of people ... 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 ... 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. 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... the difficult part was not knowing when it would come back on. And it was winter and so you know, you have heat issues ... 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 worked 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... 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. 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 ... means more investment in the infrastructure, so as an organization and as a citizen, I'm interested in the continued development of the transmission infrastructure.

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

54. And I don't mean to overlook our tourism side either — Killington resort. They're I think running that gondola is about \$500 an hour.
55. 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.
56. Well, I think they know what their mission is and I think they [VELCO] know that unless we have a strong transmission system we don't have the system. And that's why we're here tonight.
57. I am 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.
58. 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. 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... bear some of the cost of connecting to that grid and maintaining the constancy... How do we maintain the constancy, the reliability of power on that basis?
59. The plan didn't mention of what impact new renewables in the state will have on costs either up or down.
60. My big thing is renewables and how that's got to be dealt with.
61. I came here to let the planners know that I think... there are communities in Vermont right now that are questing to have local generation. I went to a wind synopsis 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 ... 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... I think it makes them feel more comfortable about having an obtrusive... 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... 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.

62. ...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. The [Rutland] Chamber and Rutland 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.
63. 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.
64. As an individual I'd certainly support what Ken was just talking about — about the East Mountain project. It ought to go forward.
65. 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 is power? Or quality is power? Or a combination? Or maybe it's an obvious thing that might be just a little opportunity for improvement.
66. 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 feature in that there is some consideration. So I think maybe there should be sort of two 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.

67. With respect to planning 10 and 20 years down the line I totally agree with what you're saying about considering scenarios. This has got to include the Public Service Board, VELCO, everybody, so that when those things happen you can move. You've got to have figured out and have it ready to go. Just the same way with a lot of other things with our government that [we need] more planning and really looking at innovative things and innovative ways of doing things. I sincerely believe that there's going to be a lot more localized production of power all over the state. And I learned that the transmission lines are not set up to take you know totally deal with that.
68. About smart meters and smart grid: A lot of people think that that's going to be the answer to everything. 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 who 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. I've only been in this state 40 years and I've found 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 at this time period? If you can flick off your air conditioning for an hour or two? We just assume people aren't going to respond to that. And I think that's a mistake. It doesn't mean 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 500, 600 or 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.
69. We've got a bunch of employees around here so the three of us can't even testify... I was listening on VPR the other day when Kerrick was on with his piece [about smart grid]. 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... 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.

70. The Smart Grid was talked about tonight and those kind of things. I mean, I know locally people are excited about that concept. And CVPS will be investing in and I want to be at the head of the line when it comes on for my home. 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... 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.
71. 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 ... 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 ... I think that rather than counting how good Vermonters are too much, we ought to give him an interruptible service.
72. 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 who to talk to about their horrible cutting job they did on Town Hill Road. I have names to talk to and they're going to contact me so I've been very happy.
73. My concern is not really a concern with VELCO. It's a concern with the process of energy planning in the state. We have delayed ourselves in making plans to the point where it locks us into decisions. VELCO is talking about needing five years at least to go through the planning process in order to develop new, big, transmission lines. If you're going to take Vermont Yankee off the grid you're going to have to bring it from someplace else. You need lead time to make those decisions. If we're not making those decisions in a timely fashion, it's making decisions for us because we don't have the infrastructure to make the change. And I guess the drill down on replacing Vermont Yankee — 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 ... 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. 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. But for example, if you build 500 one-megawatt wind turbines, that would replace the entire power supply, 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 a full replacement in wind, the state could then become a net exporter. Bringing the concept of base load back into it, is there anything in the VELCO plans to enable or potentially block the capability for us to have pull the base load from the regional grid when we need it but on windy days push back in and effectively net meter the state. 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.

74. I 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, that were even possible.
75. I love these economic comments about how are you going to shut down Vermont Yankee.? It's going to destroy the economics of the region. It's like well, if you just shut it off you are screwed! But if you replace it with locally generated sources with nothing but wind... I mean, instead of sending the money to Louisiana or Mississippi... 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.
76. Look at how localized sources of generation are maybe going to impact the need for sort of power transmission connections to the world outside of Vermont and 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.
77. [I support] the what-if scenarios idea because that was one of the things that stuck out when I read the report ... 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 concept.
78. 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 — were 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.

Local knowledge, local projects

1. 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 Nova Environmental Powers 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's 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 nevertheless ... 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.

2. 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. 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... 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. 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.
3. I would say because they [GE] ... 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 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. 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. But they use a lot of it.

4. Well, I guess I would say that this is not the first time that I've seen the draft plan. I think 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.
5. 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.
6. I think in our town there's more involvement and an energy committee is getting going. As a town, we're going to try to be doing more mostly to conserve energy. 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, or the State. As a town 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 and local energy committee I think would be useful.
7. It would be good to collect local project information by county rather than by town.
8. We're looking at turning off 40% of our street lights and removing them. 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. And for them it's a lose-lose because it's off-peak power... 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 the \$50,000 [of federal stimulus money] ... 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 that are electrical-based. But just no generation yet. The one thing that's electrical specifics besides the street lights is potential offices. Town facilities, electrical education projects. ... One of the things we're looking at is 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.

9. I personally have on the some-day list is hydro generation from White River using – potentially using the new Connecticut-based underwater windmills so Hydro Mills. It's just like a turbine but for water and you stick it in the water and as the water flows by it spins the turbine. I don't think that's going to be a giant amount of generation, but it can certainly help. 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. ... I don't know who owns Hurricane Hill. It's just that it would be a great site for wind.
10. [Hartford Energy Committee] 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 were 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. Any way, 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. 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...

11. 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... I mean we could use that for resources on the inventory project, but we've already made significant headway on our town inventory. ...The energy used for the town buildings... Both for heat and electrical loads. We've been focusing on heat again because that's where the financial... 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...
12. 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 ??? [19:59.3) 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. 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?]
13. 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.
14. I don't think there are any generation projects on the table that are independent projects. Like Middlebury has their damming the Otter Creek... 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... I'm thinking it could [have an impact], 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...
15. Well, with CVPS you have the solar project that's going forward. You know, that will obviously provide a new alternative source. 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. None of it would be considered base load production.

16. 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 co-generation 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.
17. [Barriers to new development of local generation.] What I've seen primarily is that you have to create a fairly complicated ... corporate structure to manage that separate utility generation piece... 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.
18. Well, what you would be doing is you'd be replacing carbon-based fuels with the wood fuel. 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. One example: at one point Vermont Tubbs is running with a cogeneration facility because they were using the heat from the boilers to run their ... 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. But again, it takes either a utility coming in and making that type of investment and providing a resource or getting the businesses to operate in concert together. In either case there are some up-front costs that are fairly steep.
19. 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.
20. 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.

21. [Do you know much about the Ira wind facility? Where it will be located and where it will connect?] 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? 50 towers roughly. I forget how many he was outlining and... but he's pretty early on the process... it was just mentioned in the paper that he hired Jeff Wenberg as his public relations person... 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.
22. 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 citing, understand the market rules, the ISO New England. If you're talking about something that is more than a net meter 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. 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...
23. 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... 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...
24. [Jiminy Peak] 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. 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...

25. We are looking into 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 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.
26. They've put a wind turbine on Jiminy Peak in western Massachusetts where I was working and now they have a ski area and ... 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.
27. 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. And I look forward to seeing a wind turbine up they are spinning around. And I think we have a view of a lot of the peaks around the Castleton area ... But in the mountains all around near Castleton – whatever it's called.

The outreach process

1. Good meeting, good presentations, knowledgeable people, allowed for in-depth conversations.
2. Would like to see more turn out. You must make the link between the public and the utilities.
3. I haven't had a chance to fully review the draft plan and so I would ask was the draft plan sent out in advance to various entities... planning entities, communities, that sort of thing, or just available at these forums? It's a lot to take in being just exposed to it this evening. 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. 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.
4. *Comment*
5. I was very excited to see that such an extensive public engagement process was occurring with this 20-year planning process. Discussed comparison to Lamoille project.
6. I haven't read the full report and I was kind of hoping for a more general overview from the presentations. I think it was valuable just to go with a format that was given there. I'd leave it to the experts.

7. 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. If I had read the plan, I would have been better prepared to come in and ask questions.
8. I am starting at zero on the issue. The first I really heard of it was I think the invitation e-mail. So, I was putting off reading the plan in detail so that I could first get the big picture. I like to understand the high level and then drill down to the details. 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. Just to be totally honest, I don't think I'll get through it.
9. You know, I don't have any idea what this is about so how can I comment on it? So, through the conversation I got some understanding of what's going on ... I gave some ideas that provided some valuable feedback as far as that's relevant to this effort. ... 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. 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. ... And based on... maybe I would have done more homework if I had expected to not have it.
10. 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 ... 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 I understand that this is our time to get reactions, but it's hard to have reactions in that time frame that we haven't had time to digest the report. 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.
11. The food was great. 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.
12. [Value of web access to the report:] 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 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.

13. 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.
14. I guess I agree with you on that; more pinpointing in 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 projects.
15. 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.
16. 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.
17. 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.
18. Well, I'll be honest with you. I think your best case scenario would be to get uneducated 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. 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.

19. 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 to have more of a classroom-type setting before asking all of the questions.
20. 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 doesn't know how they are affected by this so they wouldn't 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.
21. 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.
22. 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...
23. 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.

24. 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... 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.
25. 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.
26. 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 build 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 ... 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 ... unless there was a significant change in either the cost of the power that people are ... receiving or in their reliability.
27. 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. 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.

28. 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...
29. 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.
30. I was clarified on the iterative pattern here. This isn't a once in a great while thing, but it's every three years the process starts over. And I think that's good because we need to think about this at least once every three years for the next 20 years.
31. First I wanted to... I forgot to start off my last comments with applauding the general direction of this effort. I think VELCO saw what happened with the power line up in the Chittenden/Addison County corridor. The Northwest Reliability Project. 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.
32. In terms of a collaborative and involved process, first what would be great would be to solicit public input before a draft plan was done. Maybe it was done. Solicit input at the very early stage. The problem with this issue — transmission planning or transmission lines — it's really hard to relate to people. 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 be creative in how you relate this issue back to people. Second, public forums are great but it's a very limited way of reaching out to the public. You have those people who are motivated like us here... You have to go to people rather than expecting them to come to you. You need to relate to a personal level: imagine that utility rates are going to go up. Would you be willing for \$20 a month reduction in your utility bill to have your air conditioning shut off on demand? Something so it has to be on a very personal basis: those appliances that you use cause X demand and if we didn't have that... 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.
33. Following up with what Paul was saying, I'm hoping everybody understands what he means by “go to” [the public]. 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, 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 ... it would be good to have the actual costing: if you were to shut your air conditioner off for two hours turn this off, or exactly what does this TV [power cost] 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.

34. The original draft of the long-range plan included a lot of information that was determined to be confidential.... So, a lot of information that we saw on the [Vermont System Planning] 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... It may be a requirement. It may be needed. But it takes away the transparency and... It has to do with planning information that could be used by terrorists. But a lot of information has already been out there in the past. 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 about the process? And I can already see some things that may be missing from the earlier version. 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, information that I think is just good to have out there, whether people read it or not. I know people don't always pay attention to these things, but ...

Section B: Public Comments Received in Writing

Commenter: James Matteau, Executive Director, Windham Regional Commission

The comments contained herein are based in discussion at the WRC Energy Committee meeting on May 14, 2006. The Committee next meets on June 11, and may wish to file supplemental comments after that date if that is acceptable.

Our initial comments include that the plan as drafted appears overly focused on transmission capacity and inadequately addresses non-transmission alternatives (NTA). At the public meeting in Brattleboro, one of the presenters emphasized that VELCO "...is not a generation company and not a distribution company. We are a transmission company."

The plan does not adequately address the aspect of control of the flow of power as a component of reliability, in addition to capacity and redundancy. The plan's focus on lines, substations, redundancy and the need to meet growing peak demand loads does not adequately consider:

1. Control and communication systems as essential components of overall reliability, including so-called "smart grid technologies."
2. A different kind of reliability threat that is posed by hackers and cyber-terrorism, which are not addressed.

3. Access to renewable, such as potential wind sites that are not now within reasonable reach of the transmission system.
4. The potential benefit of increased distributed generation across the system

We are concerned that if the NTAs and smart grid assessments are left out of the plan and left to another day, we may risk never conducting a truly comprehensive analysis and thus miss opportunities to change the trends, never “bending the curve.” We would risk remaining slaves to peak load growth by not taking steps to alter the drivers of that trend.

The system as described, and the long range plans we as understand them, appear to remain overly reliant on electro-mechanical systems. Electronic systems would seem to offer capabilities for quicker and more effective response to changing circumstances and demands, thereby contributing to a more long range view of reliability and robustness. The document is titled “Long Range Reliability Plan”, implying intent to take advantage of emerging technology, but it reads more like a straightforward update of a plan to enhance the physical reliability of the existing system.

The term “reliability deficiency” is not defined. We suggest that a definition should include a focus on the benefits of distributed generation, IT control systems, and access to future renewable resources, including stranded resources. In this last case we are referring to upgrading existing infrastructure could accommodate that input, such as distribution lines that run near viable wind resources but could not now handle the additional input, and not “lines to nowhere.”

In general, we urge a planning process that is less reactive and more forward looking to source driven approaches and technology driven systems.

Commenter: Paul Markowitz, Vermont Chapter of Sierra Club

1. Scenario planning: I would like to several scenarios laid out that show different possible energy futures - and then if these materialize - VELCO can respond to them. For example, what happens if Vermont meets 25% of its electrical needs with in-state, distributive energy resources by 2020 - what are the implications for our electrical grid. Along the same lines, I think it behooves VELCO to look at alternative load growth scenarios - not just to presume that load will grow at 1.1% annually.
2. More emphasis on load shedding and NTA: I think there should be more emphasis on NTA (non-transmission alternatives) -such as load shedding wherein customers reduce load at certain times of day in respond to financial incentives. I would like to see a more extensive examination of these options outlined in the plan.
3. More upfront public input: I applaud your efforts to seek public input into the transmission line planning process. However, asking the public to comment after a draft plan has been prepared is inadequate. I would like to suggest a more extensive upfront public input process wherein you solicit input at the very beginning of your plan development process. I realize the transmission

line planning is difficult to get the public excited about - and they sure get excited when you are proposing to put a new line in their backyard. I encourage you to be creative in your outreach efforts and queries - particularly around customer/end-use efforts to influence load. For example, do you have a sense of how much the public would be willing to be paid to have their air conditioners shut off at summer peak load times? Are they receptive to the idea?

4. Broad scale statewide electrical planning needed: It is difficult to fully evaluate the validity/usefulness of the VELCO plan without the context of a broad-based, multi-stakeholder, participatory process in the creation of an overall statewide electrical planning process. I would urge VELCO and the advisory board to urge the PSB and DPS to engage in this type of process pronto.

Commenter: Alvin O. Converse, Professor of Engineering Sciences, Emeritus, Thayer School of Engineering, Dartmouth College

Thank you for a well structured meeting. Velco seems to have done its job well but:

1. I asked whether the transmission system was well positioned to serve a large scale wind energy supply from within the state, and was told that it was not. I think that the plan should consider this contingency. Also the regions close to existing transmission corridors should be evaluated as possible sites for wind and solar generation.
2. I expect that space heating and transportation will use more electricity in the future. I think that the plan should consider this contingency.

Thank you.

Commenter: John R. Spencer, PE, Executive Director, VEPP Inc.

I have the following comments on the 2009 Vermont Long-Range Transmission Plan -Public Review Draft ("the Draft Plan"), issued April 2009.

1. Step 2A, #13 of the Memorandum of Understanding, Docket No. 7081 ("the MOU") states that a determination shall be made "whether each Reliability Deficiency identified in the draft Plan is Bulk Transmission System, Predominantly Bulk System, Predominantly Subsystem, or Subsystem". I don't see these distinctions clearly identified in the Draft Plan.

These distinctions are important for two reasons. First from a technical perspective, the standards for reliability may be different for "Subsystem" projects than for "Bulk Transmission System" projects as mentioned on page 3, paragraph 1 of the Draft Plan.

Secondly from a cost perspective, it is likely that "Bulk Transmission System" projects, and "predominantly Bulk System" projects will qualify for categorization as a "Regional Benefit Upgrade" which will dramatically reduce the Vermont ratepayer's cost impact. Conversely, it is

likely that the Vermont ratepayers will pay the full costs of “predominantly Subsystem” projects, or “Subsystem” projects.

2. The MOU in Step 1, #9 requires identification of the performance specifications that NTAs will need to meet to achieve “Equivalence” for each reliability deficiency. I believe the intent of this requirement is to develop the specifications prior to the NTA screening. How can a NTA be screened if the specifications for equivalence have not yet been determined?

Page 21 and 22 of the Draft Plan give the results of the NTA screening, along with a discussion of what is necessary for an effective non-transmission alternative and provides a table of rough magnitude for potential NTAs. However, nowhere are the NTA specifications necessary to achieve equivalence described for each reliability deficiency as required in Step 4,#28, j.

Can a reasonably configured generator NTA actually be equivalent to transmission reinforcement under the federal policy which sets explicit, mandatory reliability criteria for transmission system design? If a generator NTA can’t achieve equivalence under federal policy, it is important that all parties to transmission planning in Vermont understand this fact. If a generator NTA can defer transmission reinforcement, the necessary specifications should be made public so that power plant developers can consider developing these projects.

I appreciate the opportunity to provide these comments.