STATE OF NEW HAMPSHIRE

PUBLIC UTILITIES COMMISSION

January 8, 2021 - 9:14 a.m.

[Remote hearing conducted via Webex]

RE: IR 20-192
INVESTIGATION INTO THE EFFECTS OF THE COVID-19 EMERGENCY ON THE RENEWABLE ENERGY INDUSTRY
(PUBLIC COMMENT HEARING)

PRESENT: Chairwoman Dianne Martin, Presiding
Commissioner Kathryn M. Bailey

Jody Carmody and Doreen Borden, Clerks
Eric Wind, PUC Remote Hearing Host

APPEARANCES: Reptg. Clean Energy NH:
Madeleine Mineau

Reptg. Revision Energy:
Daniel Weeks

Reptg. Granite State Solar.
Eric Kilens

Reptg. Aligned Climate Capital:
Andrew Catania

Reptg. Harvey Woods, LLC:
Gregory Dubela

Court Reporter: Susan J. Robidas, NH LCR No. 44

APPEARANCES (CONT'D):

Reptg. Froling Energy:
Mark Froling

Reptg. Lyme Green Heat:
Morton Bailey

Reptg. PUC Staff:
David K. Wiesner, Esq.
Karen Crampton

I N D E X

P R O C E E D I N G

CHAIRWOMAN MARTIN: Okay. Welcome, everyone. We look forward to hearing from you. We're here this morning in Docket IR 20-192, which is the investigation into the effects of the COVID-19 emergency on the renewable energy industry. We have to make some findings because this is being held as a remote hearing.

As Chair of the Public Utilities Commission, I find that due to the State of Emergency declared by the Governor as a result of the COVID-19 pandemic, and in accordance with the Governor's Emergency Order No. 12, pursuant to Executive Order 2020-04, this public body is authorized to meet electronically. Please note that there is no physical location to observe and listen contemporaneously to this hearing which was authorized pursuant to the Governor's Emergency Order. However, in accordance with the Emergency Order, I am confirming that we are utilizing Webex for this electronic hearing. All members of the Committee --

sorry -- the Commission, have the ability to communicate contemporaneously during this hearing, and the public has access to contemporaneously listen and, if necessary, participate. We previously gave notice to the public of the necessary information for accessing this hearing in the Order of Notice. If anyone has a problem during the hearing, please call (603)271-2431. In the event the public is unable to access the hearing, the hearing will be adjourned and rescheduled.

Okay. We have to take a roll call attendance of the Commission because this is a remote hearing. My name is Dianne Martin. I am the Chairwoman of the Public Utilities Commission, and I am alone.

Commissioner Bailey.

COMMISSIONER BAILEY: Good morning, everyone. Commissioner Kathryn Bailey, and I am alone.

CHAIRWOMAN MARTIN: Okay. I have a list of people that had pre-registered. I'm going to read through it and see who is here

and who may not be. I have Madeleine Mineau, which I can see on the screen. I have Dan Weeks for Revision Energy. Okay. Paul, and I apologize if I say your name wrong, Lesure, and Eric Kilens from Granite State Solar here -- I see one hand. And who are you? If you can identify yourself.

MR. KILENS: Eric Kilens.

MR. LESURE: Paul Lesure is here as well.

CHAIRWOMAN MARTIN: Oh, okay. I didn't see you. Okay. Thank you.

All right. I have Andrew Catania and Brendan Bell from Aligned Climate Capital. Are they here?

MR. CATANIA: Andrew's here. Brendan will not be.

CHAIRWOMAN MARTIN: Okay. Gregory Dubela from Harvey Woods, LLC.

MR. DUBELA: Right here.

CHAIRWOMAN MARTIN: Okay. Welcome.

Mark Froling from Froling Energy. Mr. Froling?

MR. FROLING: Yes, I am here.

CHAIRWOMAN MARTIN: Okay. Thank you.

Tom Garden from Triland Partners?

Mr. Wind, did you have him as present?

MR. WIND: No, I have not. That's the one that we're missing still at this point.

CHAIRWOMAN MARTIN: Okay. Thank you.

Morton Bailey. Am I missing you, Mr. Bailey? Are you here?

MR. BAILEY: Good morning, Chairwoman Martin. Thank you for having us all together today.

CHAIRWOMAN MARTIN: Good morning. Welcome.

And someone from Lyme Green Heat. Do we have Lyme Green Heat today?

MR. BAILEY: That is me, Chairwoman. Morton Bailey.

CHAIRWOMAN MARTIN: Oh, got you. Okay. Great.

And we have Attorney Wiesner and

Ms. Cramton from the Commission. Yes, I can see you both.

And I see Mr. Sheehan. Are you planning to speak?

MR. SHEEHAN: I was not. Thank you.

CHAIRWOMAN MARTIN: Okay. Great.

Anyone that I did not call out?

[No verbal response]

CHAIRWOMAN MARTIN: Okay. Well, then, let's get started, starting with Ms. Mineau.

MS. MINEAU: Thank you so much, Chairwoman and Commissioners, for the opportunity to speak with you this morning about this important topic.

Clear Energy New Hampshire has roughly 130 business members, representing just about every aspect of the renewable energy, energy efficiency, clean tech industries in New Hampshire. And just like every business this pandemic has hit, been quite hard. There's been varying degrees of severity and how their businesses have been

affected and have been able to adapt. But I can assure you that both the pandemic itself and having to adapt to new social distancing requirements and health requirements, as well as the economic impacts of the pandemic, have affected our industries quite a bit in New Hampshire. That includes increased costs for personal protective equipment, having to have workers go in separate vehicles to work sites, workforce issues with folks having childcare issues with schools being closed and a variety of issues. So, certainly, just like many businesses, the renewable energy, energy efficiency, clean tech industries in New Hampshire have been impacted quite a bit by this pandemic. I do want to talk about a few things and then some things that we think that the Commission could do to, you know, help things as we work towards economic recovery in the state and recovering from this pandemic.

Several of our members did want to make sure that I bring to your attention a recent report that Clean Energy New

Hampshire, Renewable Energy Vermont and Vote Solar had commissioned from Synapse Energy Economics. They conducted the report on new data that was made available by ISO-New England, which allowed them to do an analysis of the value of distributed solar in New England on wholesale market prices, both load and price impact. And this showed total savings of over $1.1 billion in all of New England over six years, from 2014 to 2019. Of that, $83 million was attributed to solar in New Hampshire. The total value, when you translate that to value in kilowatt hour of energy generated from solar, that translates to 11.9 cents per kilowatt hour just in energy value. There's an additional 1.6 cents in avoided capacity value. So that's 13.5 cents. That's not counting any environmental benefits, which pushes that value to twice that. So that's considerably more than what any solar or other renewable energy at small scales that are operating behind the meter or net metered or group net metering are compensated at currently in New

Hampshire. I'm happy to share --

CHAIRWOMAN MARTIN: Ms. Mineau --

MS. MINEAU: Yes.

CHAIRWOMAN MARTIN: That's what I was going to ask, if you were going to have or were planning to submit written comments, if you could include that --

MS. MINEAU: Yes.

CHAIRWOMAN MARTIN: -- that would be appreciated.

MS. MINEAU: I was going to say that. I will make sure to share that report, as well as a New Hampshire-specific fact sheet that accompanied that report. I had already shared it with several Staff members of the Commission, but not directly with you. So I will make sure to do that.

We think that renewable energy and energy efficiency businesses in New Hampshire represent an incredible opportunity to play a very important role in the economic recovery following the pandemic. And we think that that's very important and that the Commission does have a role to play in that.

The thing that businesses hate more than anything and that is harmful to them is uncertainty and unpredictability. And so we think that that is something that the Commission and all regulators should keep in mind as we're in challenging economic times. Certainly anything that can be done to reduce uncertainty and unpredictability for businesses will be helpful. In our view, that includes expeditiously approving the new Energy Efficiency Resource Standard Plan, addressing current issues with the Renewable Energy Fund rebate -- (connectivity issue)

[Court Reporter interrupts.]

MS. MINEAU: -- and grant programs, the delays in the budgets. I think the lack in communication. There's still a lot of uncertainty from our business members and ourselves as to, since some of the RFPs are not issued yet, how in the world we're going to be able to spend out the money from this fiscal year within this fiscal year, and the effects of the change -- the legislative change that occurred in 2017 and why it's

just been implemented now. And in a particularly challenging year, the fact that it's being implemented now and the effects it's going to have, that we anticipate that several rebate programs are going to close before the end of the fiscal year, it's just making matters worse. So anything that could be done to improve that would be greatly appreciated.

We also would like to see expeditious approval of the Clean Energy Fund from the Eversource divestiture and not having to wait for every single part of that proposal to be ready to move forward to approve any of the individual parts. We've been working really hard with Commission Staff, OSI [sic] staff and stakeholders to try to reach consensus. And we're quite close, but there are some parts that may need further stakeholder involvement. And we think that the parts that are ready to go should move forward without waiting for the other parts.

We would like to see progress on

grid modernization. The order was issued last June, and then there was a request for rehearing from Eversource, and we haven't heard any progress since then or any movement. There are some issues that are really important to our businesses, including interconnection procedures, hosting capacity analyses, things that we think are important to move forward on.

And finally, I'll just mention we would like to see -- to ensure the progress and completion of the electric vehicle time of use dockets without delay as well. We think those are important.

I'm happy to take any questions.

CHAIRWOMAN MARTIN: Any questions, Commissioner Bailey?

COMMISSIONER BAILEY: Yes, thank you.

Ms. Mineau, you said in the beginning of your remarks that there was a 13.5 cent kilowatt-hour something. I didn't understand what that "something" was. Is it savings? Is it costs? Tell me what it is.

MS. MINEAU: So Synapse did the analysis, and they looked at depression of cost in the wholesale market from behind the meter solar, or what ISO-New England treats as behind the meter solar, which is anything below 5 megawatts. And they found that when they translate that to a per-kilowatt-hour value of generated solar, that value was 11.9 cents just in those wholesale energy savings, and there's an additional 1.6 cents of avoided capacity savings as well.

COMMISSIONER BAILEY: Okay. I'll take a look at the report. Thank you.

MS. MINEAU: Thanks.

CHAIRWOMAN MARTIN: Okay. Thank you, Ms. Mineau.

All right. Mr. Weeks.

MR. WEEKS: Good morning. Thank you so much for the opportunity, Commissioners, to share our perspective on behalf of Revision Energy regarding specifically the commercial solar market in New Hampshire post-COVID. And I hope to spend a little bit of time providing a little

bit of broader perspective that I think may be helpful. I do thank you so much for taking time to hear from the industry and consider our experience and some of the unique challenges that we've faced in the course of this very unique last year.

My name is Dan Weeks. I am director of market development for Revision Energy. We are an employee-owned solar company with close to 300 employee owners across Northern New England. Our primary markets have been Maine and New Hampshire historically. We expanded into Massachusetts three years ago and do a small amount of work in Vermont. Historically, New Hampshire and Maine have been roughly on par in terms of market opportunity for our company, on both residential and commercial. As I'll share with you, that has changed quite radically in the last year, in particular with substantial growth in Maine and lack thereof in New Hampshire.

Revision is also a certified B Corporation, and we're proud that among our

300 co-owners, the majority are in the trades directly, electricians or apprentices on the road to becoming electricians who are building systems every day, including on a nice, sunny day like today.

Just for a little bit of background on New Hampshire commercial solar coming into the pandemic, and then I want to speak directly to what we experienced, starting with the stay-at-home in March.

So the Solar Job Census conducted each year by the Solar Jobs Foundation found that direct employment in New Hampshire solar fell roughly 15 percent between 2017 and 2020. And I'll share some of the reasons that we see that took place, mostly to do with policy in New Hampshire. And even more concerning, the number of solar companies doing business in New Hampshire dropped over that period, from 2017 to 2022 -- to 2020, by fully 42 percent. And that was again before the effects of the pandemic are taken into account. For a company like Revision with a strong footprint, arguably there's a

competitive advantage to seeing fewer companies in the state, but that is not the ecosystem that we want to see. And it's very worrying to us and I think others in the industry and beyond that we had such a significant decline in the number of solar businesses operating in New Hampshire.

Also worth noting that jobs in this industry pay roughly twice the median wage of prevailing jobs in New Hampshire. So that loss in jobs did have an outside economic impact on the state's economy as a whole, again, prior to the economic effects of the COVID pandemic.

Also worth noting that nationwide, the U.S. Bureau of Labor Statistics has found that a solar installer has been the fastest growing job nationwide over that same period, 2017 to 2020.

What we also saw moving from jobs to overall role of solar as a contributor to New Hampshire's energy is that, again, between the period 2017 to 2020, New Hampshire's solar ranking -- that is, the

percentage of state electricity coming from solar -- fell from 33rd in the nation in 2017 to 41st today, and that is with less than 1 percent of our state's electricity, .67 percent, coming from solar today as compared to 17.4 percent in Massachusetts and 15.3 percent in Vermont. Maine, which was the only state lagging behind New Hampshire until last year, has undertaken some substantial changes in policy and is now on a very rapid growth path to, we expect in the coming years, catch up with Massachusetts and Vermont. And these statistics I will submit to the Commissioners. These come from reporting done on a quarterly basis by the National Solar Energy Industries Association and, as I mentioned, the Solar Job Census. I'll be glad to submit the full details to you.

So that's a little bit of the context that we had coming in. And I did want to mention those statistics because I believe that while the immediate topic at hand, the COVID impacts on the industry, are

very important, I do believe that there is a larger context that has exacerbated the challenges that we've seen which existed prior to COVID and which, in my view, calls for the Commission to consider and perhaps pursue some alternative courses.

COVID impacts were, as Madeleine noted, not dissimilar to what other construction industries experienced. Revision Energy does historically roughly half of our solar business is residential, the other half commercial. And we have -- as of the stay-at-home in late March, we suspended all residential installations of solar, as well as complimentary technologies on the thermal side, electric vehicle charging and battery systems, so as not to put any of our co-owners or, of course, our clients at risk. So we immediately acted to suspend all residential installations for the month of April and May and then gradually began re-initiating residential work in the month of June. And it was only by mid, late summer that we were back to more or less full

strength. We were, as a member of the construction industry, technically exempted, and so were allowed, under state rules issued by the Governor, to continue installations. But we felt it was prudent for the sake of our customers and co-owners to suspend all those operations.

As a consequence, as you can imagine, our monthly revenues and net profits dropped to near zero after a very strong first quarter of 2020. We were at near zero in the month of April and only gradually rebounded, with the majority of the next six months, those first six months of the COVID impact, seeing lower net revenue than the year before, even though company-wide, particularly in Maine, there was strong growth.

We did also, as a direct response to the stay-at-home orders, have to furlough roughly one third of our workforce. Fortunately, with the help of the PPP loan we were able to bring those employee owners back by summer. But for much of the spring we

were operating at roughly two-thirds strength.

This stands in stark contrast to what we as a company, and I think other companies, have seen across state lines, particularly in Maine, where Revision has had a strong footprint since 2003 when we were founded. We've operated in New Hampshire since 2009.

And just at a high level on the jobs front, Revision added -- historically, New Hampshire and Maine have contributed roughly equal shares to our business, in terms of total revenue, both residential and commercial. But in New Hampshire this year, we hired only half as many people as we hired in Maine, and it was thanks to the strength of the Maine market that we were able to make any hires at all in New Hampshire and avoid layoffs at the end of the day.

On the revenue side, we saw a six-times growth in Maine commercial work as compared to New Hampshire commercial work, even though in the final quarter of the year

we were able to bring our commercial projects back, particularly with an anticipated step-down in the solar investment tax credit, creating a sense of urgency for clients. We did see a strong fourth quarter, but overall, again, roughly one-sixth the amount of total commercial work being closed in New Hampshire as compared to Maine, whereas again historically the two states have been roughly on par.

I want to close by discussing some of the impacts beyond just COVID because I've shared some comparative numbers where, in spite of the pandemic, our market performed very well in Maine, but not well in New Hampshire, and just a few reasons why we have seen that be the case, having again more than a decade footprint in New Hampshire and nearly two decades in Maine, so we think a fairly deep understanding of the two markets. There are a number of factors, of course, at play, but a few that I just want to bring to your attention because they are directly affected by or managed by the Public

Utilities Commission.

With respect to rebates, which Madeleine referred to, we have seen a very substantial, 90 percent, drop in rebate per project rebate value from less than two years ago, $150,000 as the rebate ceiling, to now $10,000 as the rebate ceiling. There was an intermediate step from 150 to 50,000. So projects which historically were able to get a significant boost in the form of a substantial rebate are now looking, at best, at a $10,000 rebate. The formula as well has dropped from 65 cents per watt to 40 cents per watt as an intermediate step, and down to 20 cents per watt today. So the rebate value, total value and formula, has dropped very substantially, meaning that a lot of the projects that Revision seeks to pursue as a benefit corporation for local nonprofits, for small businesses which really relied on those rebates -- these are smaller commercial projects, up to 500 kilowatts -- they have become increasingly challenging to pencil financially.

We have the rebate issue is one that I know is being discussed, and it is certainly our hope that monies previously allocated for this purpose can be freed up. We understand that they're not currently available and that the current roughly $40,000 in available commercial rebate dollars under the Renewable Energy Fund, that that money will be very quickly spoken for. And if indeed it needs to be -- it can only can be applied to projects completed by June of this year. That will mean that many projects that would otherwise be eligible will not.

At the end of the day, what this means for my team and I in developing our commercial projects is that we cannot in good conscience represent to our clients that there will be any rebate dollars at all, either because it's not realistic to complete the installation by a recently advised short cutoff of June 7th, or simply because of the small amount of money currently in the Renewable Energy Fund. We don't want to

mislead our clients. So, unfortunately, we're going from being able to represent $50,000 or even $150,000 rebates to client to now no rebates at all, at the same time as the federal investment tax credit has stepped down from 30 to 26 percent. So that is one challenge.

Another is that the net metering value, the effect of value since the 2017 ruling has very significantly impacted project economics. Prior to 2017, as you all know, there was one-to-one retail net metering, which was in line with what we have seen from other state Public Utilities Commissions and independent studies of the value of solar, so to speak. But with the adjustment to large customer generator net metering values -- so, systems over 100 kilowatts AC -- now being set at the default supply rate only, we have seen that the net value of any solar project that crosses the 100 kilowatt threshold has gone from a high default service value of 11.25 cents in Eversource territory to the latest

Eversource rate of 6.6 cents. So, again, the value of solar generation once a system crosses the 100 kilowatt threshold has dropped almost in half, from 11.25 to 6.6 cents, meaning that the cash flows for a customer, whether a town, non-profit or a business that is considering solar, is now far weaker than it was just a few years ago.

Again, I contrast this to neighboring states where, through a process established by the Maine PUC of empirically assessing the value of solar in that state, as Massachusetts has done, the current value of solar in Maine above 100 kilowatts and all the way up to 5 megawatts, rather than New Hampshire's 1 megawatt cap, is now roughly 13 cents per kilowatt hour as compared to, again, 6.6 cents in New Hampshire. In Massachusetts, that rate has been as high as 21 cents per kilowatt hour.

One other related point is that because that 100 kilowatt threshold, the crossover from small to large customer generator produces a substantial drop in the

effective value of solar, we feel it is important for the Commissioners to consider what we believe is within the Commission's jurisdiction to adjust the threshold -- that is, from small to large customer generators -- to make it consistent with the current threshold for Renewable Energy Fund rebate-eligible projects. As you know, projects are eligible for rebates up to 500 kilowatts, whereas at the 100 kilowatt point they are considered large customer generators for net metering purposes.

What it would mean if the Commission did adjust that threshold from 100 to 500 kilowatts is that a large body of prospective commercial projects in New Hampshire, particularly for schools that typically have enough roof space for anywhere from 100 to 500 kilowatts, high schools being the exception at roughly 1 megawatt, but most elementary and middle schools can accommodate in the somewhere up to 500 kilowatt range. Many small businesses, including manufacturers, are also in that range.

That's something of a sweet spot we see. Those facilities that have ample on-site load, so that they would consume most or all, or sometimes much more electricity than they're actually producing on their site, then they would then be able to use that at higher value to offset their on-site consumption.

As you know, the crossover from small to large customer generator not only provides a reduction in energy value, as the formula provides for only default supply, not the transmission or one quarter of distribution that is provided for large or smaller systems, but it also results in instantaneous netting rather than monthly netting. And putting those factors together, the effective result is that I and our team, when we're sitting down with the local business or non-profit that maybe has roof space for 300 kilowatts, we have to advise that they not cross the 100 kilowatt threshold and therefore not offset a more meaningful share of their load based on the

regulatory hurdle that we face.

So I know I've taken a fair bit of your time. I would be very happy to answer any questions you have. But I did want to underscore that, again, harmonizing the small customer generator threshold to bring the net metering threshold so that it is consistent with the Renewable Energy Fund rebate threshold at 500 kilowatts would be a very meaningful result to help a lot of small businesses and non-profits go solar.

And then more broadly speaking, I know the Commission is busy working on the matter of the Value of Solar Study. I believe that RFP was issued early this year. I'm not aware if any vendor has been selected or if that work has formally begun. But if New Hampshire is able to follow the example of all of our neighboring states, conduct an empirical analysis, we expect, based on all our neighboring states, that the results will be an enhanced value for solar based on its actual contribution to the grid, as the Synapse study suggested, and that would

present a significant opportunity for the growth of this renewable energy industry.

The final thing I'll say, and thank you again so much for this opportunity, is just that we see tremendous opportunity for job and economic growth in New Hampshire. So far, we have a bit over 100 megawatts of installed capacity compared to several thousand megawatts just south in Massachusetts. That means that if we do follow eventually this growth trajectory, there will be many billions of dollars of economic investment in New Hampshire to generate renewable and ultimately very low-cost energy for our state. We will able to conserve today the roughly $5 billion that we export in New Hampshire dollars to import non-renewable energy sources from outside of New Hampshire. And most significantly, those billions of dollars in future solar investment that we do foresee will result in many thousands of jobs paying well above New Hampshire median wages. That's something Revision is very committed to with an

in-house apprenticeship training program that we launched two years ago. And we would love to see that grow to keep more of our young people in state, to provide good paths to employment that aren't necessarily the traditional college path, and to ultimately help our local environment and sustainability in the state.

So thank you again so much, and I'd be happy to take any questions you may have.

CHAIRWOMAN MARTIN: Commissioner Bailey, do you have questions?

COMMISSIONER BAILEY: I have a lot of questions, but I don't want to... I guess my first question is do you believe that the Commission has the authority to change the threshold from 100 kilowatts to 500 kilowatts? Isn't that a legislative issue?

MR. WEEKS: Thank you, Commissioner Bailey. I am not a lawyer and certainly not an authority on the relative jurisdictions. It is my understanding, having sat through a number of legislative hearings, I believe, and perhaps Madeleine can speak to this

further, that PUC Staff has represented to the Legislature that they view it as being within their authority. And again, because of the disconnect between the current threshold for REF rebates, which you do fully administer, and the net metering thresholds, I believe that it is. Perhaps Madeleine can speak to that further.

MS. MINEAU: If you'd like me to add. My understanding and what's been discussed at the Legislature when this had come up before, there was a bill to propose this, making this change previously or changing the thresholds by some amount. And in those hearings, my understanding is that House Bill 1116 -- (connectivity issue)

[Court Reporter interrupts.]

MS. MINEAU: -- which tasks the Commission to review net metering tariffs, included the authority to make changes, including what is the definition of a large versus a small customer generator. In the net metering docket in 2016, 2017, that demarcation was discussed and was part of

that order. So I think that further changes could be made by the Commission.

COMMISSIONER BAILEY: And Mr. Weeks, if we increase the threshold to 500 kilowatts, wouldn't that exacerbate the rebate problem, in that we have less and less money every year from ACPs to spend on rebates? How do we deal with that?

MR. WEEKS: Thank you, Commissioner Bailey. As a large part of my job, I spend every day in cash flows, and so I'm aware of the sensitivities of rebates as compared to energy value. And I can say that in virtually every case, energy value is a significantly more impactful driver of project economics, particularly in the last year since rebate value dropped to $10,000. So, yes, we would expect that ACP revenues would decline, and so REF funding would probably also decline. But given a choice, frankly, between higher energy value and the loss of rebates, frankly, higher energy value would make many more projects feasible, and we would take that choice. Again, what we're

having to do today is, in my view, artificially downsize projects, or even discourage projects, or not pursue projects for a large category of smaller businesses, small to midsize businesses and non-profits that have ample on-site load just because they fall into a sort of doughnut hole. There aren't the economies of scale. We can't build quite cheaply enough to be able to absorb that loss in energy value. But they do have the space and certainly the load to be able to use that power in the way that a small customer generator typically does.

COMMISSIONER BAILEY: Can you talk a little bit more about what you mean by "energy value"?

MR. WEEKS: Sure. I referred to the default supply rate, which for Eversource is currently 6.6 cents, which is the net metering value for any system of more than 100 kilowatts. As you may hear from others this morning, and I didn't note this per se, but that is actually a direct COVID impact, in that the decline in that energy cost and

wholesale energy is linked to the drop in gas prices as demand across the economy has significantly slowed during the COVID economic recession. So we do see that significant drop from the high of 11.25 cents as Eversource's default down to 6.6 cents as being directly related to the COVID challenge.

But to your question, that is the key ingredient in energy value, what the net metering rate is, based on the customer generator class, whether small or large, below or above 100 kilowatts. But the other factor that we also model is their on-site, behind the meter consumption. And this is based on their current supply rates. So it includes not just supply, but also transmission, distribution of stranded costs and systems benefits. We add those numbers together, and then we analyze their historic load to determine what percentage of their consumption -- sorry -- what percentage of their solar production will be net-metered therefore will have to be sold at that energy

value, and what percentage will be used on site to offset full retail value. This gets a little bit into the weeds, but this is where the monthly versus instantaneous netting does have a very significant impact.

Again, a small customer generator gets higher energy value and nets on a monthly basis. So their excess daytime solar production, as I have at my home solar array, can offset energy consumption from the grid that night or on a rainy day. And what happens when we cross 100 kilowatts is that the percentage of their solar generation that ends up being sold to the grid because of instantaneous netting can double or more; that's to say that the amount of solar offsetting full retail value goes down substantially. The portion that is therefore sold at the much lower default service rate, the current 6.6 cents, goes up. And so the net blended rate that we model in our cash flow, which would ultimately be what I'm referring to as the "value of solar," goes down significantly. And again, we've seen

since the net metering ruling was implemented in 2017, on the order of a 40 percent drop in the effective value of solar for a typical commercial customer.

COMMISSIONER BAILEY: Hasn't the cost of solar per watt also significantly declined since 2017? Can you talk a little bit about what the cost was in 2017 and what it is now?

MR. WEEKS: Thank you, Commissioner Bailey. It has come down, certainly on the hardware side. We have seen over the last decade a roughly 70 percent decline. And in the last three years that decline has been on the order of 15 to 20 percent, just based on the recent module pricing, solar panel pricing and other equipment. What I should note at the same time is that since 2017, as we and other companies have begun to pursue somewhat larger projects in New Hampshire, we have run into far higher soft costs than we had previously seen. If I can provide just a few examples, not -- sorry -- not just soft costs, but also costs on the interconnection

side that are not part of what we are designing and specking for our clients. If I can provide a few quick examples.

Historically, any system of more than a few hundred kilowatts, for very understandable reasons, requires a system impact study through the utility. That is a three- to four-month process where they assess the local distribution grid capacity at the substation, et cetera. Historically, the cost of those has been $5,000 or less. I can't think of an example that exceeded $5,000, even though we had done several mid to large commercial systems prior to 2017 or 2018. In the last two years, we've seen costs for system impact studies go up to $25,000. And so as a matter of course, we are budgeting $10,000 for midsize systems and $20,000 or $30,000 even for larger systems, none of them of course exceeding 1 megawatt today. So that's one cost that wasn't historically part of the equation. It also is a cost that doesn't benefit from the tax incentives.

Likewise, we're seeing increasingly that reclosers are being required. In neighboring states where we work, a recloser which provides additional control of the distribution grid, the cost of those is quoted in neighboring states at $40,000 to $50,000. In New Hampshire, the cost of those is quoted at $100,000 by the utility. And we have not been able to find the reasons for that, why it is so much more expensive in New Hampshire. But that is a cost outside of the traditional cost stack for a commercial solar project that we are increasingly facing for any systems of about a half a megawatt and above. And that is also a cost that does not benefit from the tax incentive. So it's a direct pass-through.

Finally, in terms of actual soft costs, we do see disparate permitting standards in every town. Each town has its own zoning ordinance. A 30-foot setback in one is 50 or 100 feet in another. The definition of a building or a structure varies from town to town. So we are

increasingly finding, as somewhat larger projects come in development, that we have to spend. The savings that we're realizing on solar panel pricing, et cetera, is unfortunately being offset more and more by increasing soft costs, permitting, environmental compliance, for a good reason, of course. But that has also become much more involved and costly just in this last year through New Hampshire DES. And so put all that together, and the net effect is unfortunately only a modest reduction in price per watt for systems in New Hampshire.

COMMISSIONER BAILEY: The comparison that you made about the cost of reclosers, were you comparing the same utilities, or is that among different utilities?

MR. WEEKS: Very good question, Commissioner Bailey. That is from different utilities. So quotes that we've had in other states, the only utility -- I'm sorry. Both Eversource and Unitil work across New Hampshire and Massachusetts. Because of the

maturity of the Massachusetts market with 17 percent solar penetration, they are now in a long-term process of making system-wide grid upgrades. As a result, in the last two years since we've had a strong footprint in Massachusetts, there's been little larger-scale commercial work. So we actually haven't had to buy reclosers in Massachusetts. But in Vermont and Maine, we're seeing the costs. So not the same utility across those state lines. But we are seeing the costs at roughly half what they are in New Hampshire.

COMMISSIONER BAILEY: And does the same go for the interconnection studies and those costs?

MR. WEEKS: So, thank you, Commissioner Bailey. We have seen also higher costs in New Hampshire, not quite as much of a disparity. It does vary utility to utility. In the case of Unitil, for instance, we see much lower system impact study costs. Those are based on their Massachusetts guidelines which have input

from the Massachusetts PUC. So in New Hampshire -- and I cannot tell you, again, because we haven't been able to build larger commercial systems in Massachusetts based on the current state of their grid. I can't give you a clean apples-to-apples comparison within the same utilities. But I can say in New Hampshire, Eversource, which accounts for roughly 80 percent of load, and most of the projects we pursue, is on the order of twice or more the cost of what we see from Unitil, based on Unitil's Massachusetts guidelines. And I should note, Liberty, where we've also done larger projects, tends to come in a bit less than Eversource, but is also certainly not inexpensive.

COMMISSIONER BAILEY: Okay. Thank you very much. That's all I have, Madam Chair.

CHAIRWOMAN MARTIN: Okay. Thank you.

Mr. Weeks, I really appreciated your presentation. It was very, very helpful. I had a couple questions.

One, you mentioned the significant growth in Maine, and you gave some explanation for that. But particularly in light of COVID, we've heard in New Hampshire of significant impacts on the commercial customers. So is that growth that you mentioned still being seen in Maine during the pandemic; and if so, how and why?

MR. WEEKS: Thank you so much, Chairwoman Martin. Yes, we have seen remarkable growth in the state of Maine throughout 2020, with really no slowdown during the pandemic, because the growth has been in the larger commercial sector -- that is, projects are generally remotely sited. The work is entirely outdoors, over multiple acres. So the ability for our teams to maintain social distancing guidelines, they're all wearing masks and taking daily temp checks, et cetera, has been no impediment to our ability to execute those projects.

But the primary reason why we've seen such strong growth in Maine, I'll

oversimplify a bit and point out the net metering cap, which there was raised up to 5 megawatts, and the net energy billing, NEB, value that was established in 2019 in the state of Maine. And I briefly mention the current value under their net energy billing system, which is established -- a rate is established for each utility once per year by the Public Utilities Commission. That value is currently 13 to 14 cents per kilowatt hour in Maine, which is more than twice the current, the latest Eversource default service rate. And again, that is for systems all the way up to 5 megawatts. And as you can imagine, the economies of scale, the build price per watt goes down significantly when you move from 1 megawatt to 5, since the greatest savings, to Commissioner Bailey's point, have been in the equipment side. The solar panels and other equipment has come down in price with a bit of a blip from tariffs that were imposed four years ago. But where we have seen the economies of scale combined with that significantly higher

energy value in Maine, based on their study of the value of solar in that state, like other neighboring states have done, has just made the value proposition much, much stronger in that state. And for that reason, we and many other companies -- Revision is fortunate to have worked in the state of Maine for nearly two decades. But just in the last year we have seen dozens of other companies, some new start-ups from within Maine, many national or regional developers from other parts of the country, come into that market. We've seen many millions invested. Certainly the amount of solar that's currently in the interconnection queue represents several billion dollars of new investment in that state and hundreds or a few thousand jobs. But again, it's primarily the ability to build up to 5 megawatts and the value of solar being more than twice what it currently is in New Hampshire that's driving that growth.

CHAIRWOMAN MARTIN: Okay. Thank you for that. How long -- I was interested

in the comment about the rebates and having to be done in a truncated period of time. How long does an average commercial installation take? You're on mute.

MR. WEEKS: Thank you. Apologies. Thank you for the question.

An installation itself, from the point of contract signing to commissioning, is at a minimum six months. But for most systems -- and by commercial, I'm generally referring to systems that are 100 kilowatts or above, although we do some small commercial work as well. Our friends at Granite State Solar are also very familiar with that market. But for any larger system, we assume now that we have to go through a three-month system impact study, which follows the one-month pre-application process with the utility. Those impact studies are now often taking four or sometimes five months to complete, although we've been told the guidance is three months. So that alone -- that's not something we can initiate because it comes with a $10- to $20- or

$25,000 price tag. So we don't initiate that prior to contract signing. So that takes us at least four months into a project.

And we cannot responsibly even undertake procurement. We do undertake permitting at some risk during that time so that we're not too delayed in project installation. But procurement, where we're spending substantial six or seven figures for a project, it is not responsible to undertake that because the results do sometimes come back negative, requiring very substantial, costly system upgrades.

Most recently in Nashua, where I'm based, we had to make some upgrades to their substation in order to interconnect one of their public schools. Fortunately, those were fairly modest in that case. But that's not something one has any visibility over prior to the system impact study being completed. And so to procure and take the other steps so that we can then initiate installation as soon as the impact study results are in is challenging for any

company. Therefore, six months is really the minimum time period. The actual installation time is fairly short. For most commercial projects, it's anywhere from two to six weeks on site. But then there's generally at least three to four weeks in additional time for the utility and local inspector to complete their inspections, for the utility to install the net meter. And so, again, six months is a very aggressive time period. More often than not, we look at 12 months for most of our commercial projects, at least 9 months. And that assumes, again, contract is signed on Day 1. The development process, often a larger project will be preceded by a LOI, letter of intent process, where we do some initial diligence because there's enough project uncertainty.

So what we see in reality for most mid to larger projects is a 18-month to 24-month total development time from the point at which they indicate their intention to do a project, they complete their RFP and make their selection, for example. Typically

18 to 24 months is the time line to actually get the system turned on.

CHAIRWOMAN MARTIN: Okay. Thank you. That helps.

Oh, no, you answered it for Commissioner Bailey, related to the reclosers. So thank you very much for your presentation.

MR. WEEKS: Thanks so much for your time.

CHAIRWOMAN MARTIN: You're welcome. Moving on to Mr. Lesure and Mr. Kilens.

MR. KILENS: Hey, everyone -- (connectivity issue)

[Court Reporter interrupts.]

MR. KILENS: I hope everyone can hear me. Thanks for the time today for allowing me to speak. My name is Eric -- (connectivity issue), and I'm a senior advisor here at Granite State Solar. I was asked to speak today on behalf of Granite State Solar to discuss how COVID-19 has impacted our company. COVID-19 undoubtedly has impacted our company. We used to come

into the office -- (connectivity issue)

[Court Reporter interrupts.]

CHAIRWOMAN MARTIN: Do you have headphones or anything you can plug in to make it a direct connection?

MR. KILENS: -- (connectivity issue) let me see if I can grab some.

CHAIRWOMAN MARTIN: If anyone needs a two-minute break, feel free to take one.

(Brief recess taken at 10:10 a.m., and the hearing resumed at 10:14 a.m.)

CHAIRWOMAN MARTIN: Let's go back on the record, Ms. Robidas.

Go ahead, Mr. Kilens.

MR. KILENS: So as I was saying, after the March shutdown, it caused really a big slow first and second quarter for our company. In particular, our sales slowed and so did our installs. Ever since then, you know, temperature checks and sanitization of our trucks and equipment are now done each and every morning by our installers before leaving the job site. On the job site, masks and gloves are worn, and surfaces that are

touched are constantly being sanitized. You know, making sure that all of our employees and customers are safe is definitely our top priority. It has, though, created inefficiencies for us along the way, ultimately affecting our bottom line. You know, so as a small business, we're proud to be where we are today. But we had been struggling before COVID hit due to certain market uncertainties created by policy fluctuations.

So just to first give you all a little bit of a background of myself. I've been working at Granite State Solar for five years now. And I was born and raised and educated in New Hampshire, getting my bachelor's degree at the University of New Hampshire. And straight out of college, Granite State Solar was my first real professional job. And "GSS," for short, offers really great paying jobs. All employees are offered health insurance, 401(k) plans, and are provided paid time off with -- we don't lay off any of our workers.

We're not like a seasonal company. We work straight through the wintertime. And working for GSS really gave me an opportunity to save a lot of money and put a down-payment on a home and eventually become a homeowner in New Hampshire and start a family here. Since owning my home, I've added solar here myself. And I've replaced my old, inefficient oil-fired boiler with a high-efficiency, ductless mini-split system. So I'm telling you this little story of mine because I think it's a good example that solar creates good paying local jobs that really helps to stimulate the local economy, and it encourages the money to stay local. Furthermore, it encourage young professionals like myself to stay and work in New Hampshire instead of looking for work outside of the state. I can just list a number of my friends from college who are now maybe living in New Hampshire but are commuting out of state for work. And I'm proud to be one of those where I can live and work in New Hampshire.

As people have previously said on this Webex, the State of New Hampshire has a tremendous amount of potential growth for solar. Currently there's less than 1 percent of the state's electricity coming from solar. So there is this huge potential for growth to further strengthen and improve the local economy while also adding more clean energy. And solar has not only shown to be good for the local economy, but it also benefits all of the electric utility customers. As Madeleine previously said, that 2020 Synapse report showed that solar saved electric ratepayers in New Hampshire about $83 million from 2014 through 2019. So that's all great.

But within the past five years, personal experience of working in the solar industry, I've only seen the industry worsen and not improve. And it's discouraging to see. In fact, within just the last year alone, New Hampshire slid from 33rd to 41st in the nation for solar. And I can just attribute I think a couple of examples to why New Hampshire is so lowly -- so low-ranked

for solar; one being, I think, is the residential and C&I rebates year after year have consistent been getting reduced. And in some instances this money gets used up before it can get replenished again. And that big disruption in the rebate program creates uncertainty for new, potential customers of ours to move forward with their project, and that causes our business to become stagnant and slow down.

Another huge reasoning I think is what I've seen as continual rate changes caused by net metering inconsistencies. And this has caused constant system design alterations for solar developers like Granite State Solar.

So what I think needs to happen is rates need to stabilize to give more consistency for the industry. What I mean by this is, ever since net metering 2.0 went into effect, Eversource specifically has been changing the rates to make net metering less favorable for residential customers. For example, charges that customers get paid for

while net metering, such as the supply charge as Dan has mentioned, have been getting reduced. Supply was at 11 cents, now it's down to 6 cents I think, while at the same time non-net-metered charges, such as the stranded cost recovery charge and the system benefits charge, have actually been increasing. So with Eversource specifically, the difference between the export rate and the import rate is getting larger, which is in return causing solar developers to have to build larger PV systems for customers in order to offset their electric bill. And what this means is it directly translates into having to build larger systems and more expensive systems, and less net in return causes a less favorable return on investment for the homeowner. Looking at this for the last four years, from 2018 until now, it looks like that gap between the export rate and the import rate has almost nearly doubled.

So, moving forward, Granite State Solar would like to see work done to help

stabilize the net metering incentives so customers can have more certainty and a more clear outlook on their investment with solar. And we'd also really like to see investments made into energy storage. I do know that right now that Eversource has a pilot program for a battery demand response program. And we'd love to see that go forward for a more permanent offering. I think battery storage offers home resilience for homeowners. And a recent study was conducted by Green Mountain Power in Vermont, that utility, and it showed that it saved its ratepayers approximately $3 million from its growing infrastructure of energy storage systems. So that study alone shows that all parties can benefit. The homeowner can get home resiliency for having a battery, and it also can help non-solar customers as well.

So just wanted to keep my speech really short and simple, so that's all I have for you guys. And so again, I just want to say thank you for the time.

CHAIRWOMAN MARTIN: Thank you, Mr.

Kilens, and thank you for sharing your story.

Commissioner Bailey, do you have questions?

COMMISSIONER BAILEY: Just one. Mr. Kilens, does Granite State Solar deploy energy storage with their PV arrays, or are you thinking about doing that?

MR. KILENS: Right now we do offer battery storage systems for our customers. We do offer the Tesla Powerwall and also the Enphase battery system as well. Right now, customers, our customers are really only using those batteries for battery backup. But we would really love to see our customers use the battery and participate in like a bring your own device program or a demand response program that has been already initiated with Eversource in Massachusetts and Connecticut. So...

COMMISSIONER BAILEY: Thank you.

CHAIRWOMAN MARTIN: Okay. Thank you, Mr. Kilens. I don't have any questions.

MR. KILENS: Okay. Thank you.

CHAIRWOMAN MARTIN: All right.

Moving on to Mr. Catania.

MR. CATANIA: Hello. Good morning. Thanks very much to you, Chairwoman Martin, and the Commissioners and Staff for the opportunity to testify today. My name is Andrew Catania. I'm a VP with Aligned Climate Capital. We are an active investor in distributed solar assets within the New England market, including the state of New Hampshire, where we have seven large-scale solar projects. And as others have noted, we'd like to draw the Commission's attention to the significant reduction of the default energy service rate over the past year.

To provide a little background on large-scale solar investing, a project's capital expenditure is generally funded with a combination of equity and debt. And that's secured and repaid with the long-term cash flows that are associated with the project's sale of electricity for 20-plus years, sometimes longer. And so when financing these types of kind of long-lived assets, where you have a bulk of costs that are

upfront during a project's construction, it's very important to have a high degree of revenue certainty so that a project can be confident that it can repay its debt service and generate cash flow.

So under the PUC 900, the group net metering tariff, these large-scale projects are compensated under a utility's default energy service rate. And so taking Eversource as an example, from 2005 to 2019, the default energy service rate has averaged 9.2 cents per kilowatt hour. And over that 15-year period, it's had about a 1.6 percent inflation rate. So there's been some fluctuation in that rate year to year. But historically, it demonstrate a level of stability. So in late December, we saw the default energy service rate approved for the upcoming six-month billing cycle, from February to July, decline from an average of 9.7 cents in 2019 to 6.6 cents for the upcoming period, which represents about a 30 percent decline in the rate. And so from our perspective, you know, we believe that

low energy costs are good for consumers. But what's concerning here is kind of the abrupt and significant change. It really creates revenue uncertainty for the long term that could be damaging for solar investment within the state. And then, again, as others have noted, it presents operational cash flow challenges for projects.

So we would just -- I have two recommendations for the Commission's consideration. We would just encourage the Commission to, you know, use any existing authority to help provide rate stability in the market; and then No. 2, we believe it's just important to value solar for its total system benefits. So we would just encourage the Commission to proceed with its work regarding the value of solar.

So, thanks very much. And again, I appreciate the opportunity to provide feedback.

CHAIRWOMAN MARTIN: Commissioner Bailey, questions?

COMMISSIONER BAILEY: No.

And thank you for your comments.

MR. CATANIA: Thank you.

CHAIRWOMAN MARTIN: Okay. Your first point. You said "use existing authority to provide rate stability." Can you walk me through what you think the authority is and what we can do there?

MR. CATANIA: I don't think we have a specific recommendation. We would just, you know, encourage the Commission to think about ways you might be able to address the issue. I think we know that in the PUC 900 tariff there is, I believe, reference to a value of solar rate. So potentially there could be work that's done on that front.

CHAIRWOMAN MARTIN: Okay. Thank you, Mr. Catania.

MR. CATANIA: Thank you.

CHAIRWOMAN MARTIN: All right. Mr. Dubela.

MR. DUBELA: Can everybody hear me?

CHAIRWOMAN MARTIN: Yes.

MR. DUBELA: Fantastic. All right. Let's make this happen.

So, hi. My name's Gregory J. Dubela. I'm the founder and owner of Harvey Woods, LLC. We're located in Stratham, New Hampshire right now. If you'd like to get in contact with me, please send me an email at greg@harveywoods.io.

First, I would like to thank the New Hampshire Public Utilities Commission for hosting this event, bringing regulators and solar energy companies together, and Government together, so we can assure that our great state has a bright energy future in the midst of the COVID-19 pandemic.

So I had no idea that I would be launching a solar energy company during a pandemic. Yet, with progress on homes installed, I speak to you all today as someone determined to positively impact New Hampshire families across the state.

Our industry provides an asset and distributed utility that directly lowers a family's cost of living. With the transition to work from home and remote learning, New Hampshire families are now paying the energy

costs, among other things, that their employers and schools used to cover. Add social distancing, self-quarantining, restaurant and bar shutdowns, and overall higher utility consumption, these families need our industry right now in a way that's smart, doesn't increase taxes, and is implemented in a way that everybody can understand. It has to be intuitive.

To put how important our industry is right now in New Hampshire, before the global shutdown, 63 percent of Americans couldn't afford an unexpected $500 car repair bill. And I can only imagine what some families right now are going through.

The whole strategy that I've been having is how can I deliver solar to the people who are going to benefit and need it the most, because the more that we can create a social safety net with stable energy and create available funds in a environment, a lending environment where there's just a lot of printing of money, we can provide energy security. That is one of the most impactful

things that we can do for families, in terms of not only deploying a COVID response right now to address issues, but also putting in short-term things where we can scale the industry, because this COVID pandemic is not a one-year thing. It's not a two-year thing. It's not a five-year thing. We are looking at, over the course of a decade, how can we transition those who were impacted the most in the state with COVID-19 and provide the infrastructure where when they are able to scale and have available funds, they can use those monies to help build the economy. I think solar energy does just that.

So, on March 6, 2020, I was hired by Aaron Russell, of Solar Endeavors, for my expertise in solar energy and emerging technologies to help grow the business. The company featured UNH engineering graduate installers, "hackathon" winners, and was a pretty old solar company in the state, with hundreds of installs actively producing energy. We were young, filled with energy, had an owner that allowed us to innovate, and

we were in an industry that will have a profound impact on the future of our local communities.

Also at the time, rumors of a novel virus from China started circulating, and talk of a global shutdown started emerging online, which I was trying to keep a pulse on. And since at Solar Endeavors the company was very "mom and pop" in terms of business structure, it was primarily paper-based. They used a centralized office. There wasn't any computer networking or anything like that. So my first order of business immediately was developing a digital strategy, a COVID transformation plan, and also developing an infrastructure that would allow us to keep operations going in the event that all employees would have to work remotely and there could be no in-person contact, or absolutely minimal in-person contact, you know, throughout a completed job.

By May 20, 2020, Aaron Russell had passed away at 57 years old, and the company

became reliant on me. And I would spend -- I spent the next 30 days at that point -- I've never worked so hard in my entire life -- to ensure that my team had jobs in the pipeline, money was coming through the door, to make sure that people were getting paid. And it was one of the most challenging things that I've ever seen, in terms of, you know, life challenges and difficult hurdles that I had to hop over. And, yeah, I just don't think I've ever worked this hard before in my entire life.

By June, thank goodness, Aaron's girlfriend assumed ownership of the company and helped to take care of a couple credit lines which we accrued before Aaron's passing. And she also helped me get the company filed for the SBA and PPP loans, and also helped legally transition the business so we could kind of deal with a death at the height of the pandemic and a global shutdown. So I believe we became one of the, at that point, one of the only female-owned solar energy companies in the state. Small team

right out of Rye, New Hampshire, female-owned. We had a lot going for us.

Although I was able to maintain our previous year's installation goals, the changes in the industry landscape -- for example, in terms of sales, things like door-to-door, can't do that, channel accounts, all of a sudden we can't do that, really. Traditional sales operations, all these different things changed. And what that --

[Court Reporter interrupts.]

MR. DUBELA: I'll slow down for you. This is my first time speaking with you all, so bear with me. I'll slow it down.

So let's see. So traditional business operations for solar. Solar finds a lot of success. It's an in-person type of product and service that requires -- it has a long networking time. It generally has a longer project-type line as opposed to other purchases that consumers can make in their homes. The different ways of diversifying the type of information that goes out -- so

you have things like doing channel accounts, door-to-door, traditional sales operations -- all these different things changed. And what this forced -- and I believe -- let's see here -- what Mr. Weeks was saying with direct employment falling by about 15 percent, and what Mr. Kilens, I believe, if I got that right, was kind of saying, you know, the industry, there's kind of a worsening feel to things. The purpose of me trying to speak to everybody is saying what are these different symptoms, if you will, and how can we create a multi-stakeholder approach to not only solve these things in an emergency order, but also to develop rules, regulations and ways of doing things that ensure success later on down the road.

So let's see here. So all of those things were changed. And by November 20th, 2020, Solar Endeavors was forced to shut its doors. And I was looking at an interesting moment where, when we looked at the job market, other solar companies were trying to handle their own things with the employees

and obligations of their teams that they already had. And I said to myself -- after speaking with the new ownership, they asked me -- they said, hey, continue moving forward. Fire up a new LLC and keep doing what I've been doing. So that brings me where I am today. There were heartbreaks along the way, and COVID-19 impacted Solar Endeavors in a profound way. The light, if you will, is that this taught me a lot that I would like to let you all know about.

So I believe that creating some sort of state initiative and a specialized task force charged with identifying, developing and deploying solar energy solutions that makes our industry faster, more secure and affordable for the local families and businesses who need us should be our primary focus, a data-driven approach, because our industry right now currently faces three major challenges that hurts our profitability. It hurts our ability to bring in reliable business, all these different things that everybody's kind of bringing up.

First one is our industry is predominantly paper-based, and all of our companies are digital; second point I want to mention is our data is extremely siloed; and third is our incentive programs aren't competitive enough, from my perspective.

So when I say our industry is paper-based, our companies are digital, what do I mean by that? Well, we use digital infrastructure for business operations. We all use e-mail and things like that. But the underlying value drivers that run the processes are still PDFs, or paper-based documents. They're tedious when working with them. And when you're working from home, where printing may not be an option, it's just a tedious thing. And it doesn't allow for a standardized, streamlined database to occur, where more innovation can be built and we can save costs by not wasting time.

So, for example, let's say I want to interconnect. I need to go to the utility web site, download their PDF application, enter all the customer's information, system

size information, all these things that everybody's familiar with. I generally will have to use a third-party software for that. Then you have to send the PDF out for signature, receive it, submit the whole thing with supplementary attachments to a dedicated e-mail address. And that is a long, lengthy process when we have very cheap digital systems that can start saving here and saving there.

The transformation of paper-based information into a digital-exclusive format with database standardization and regulation across townships and utilities would accelerate the approval process between townships and utilities, reduce the impact of administrative errors which tend to add time to a relatively simple project, and it reduces the need for unnecessary communication and costs associated with that. If we brought together key stakeholders in an endeavor, if you will, to develop a standardized kind of database and procedure, we could allow for solar companies to

complete more jobs faster, which means more people from New Hampshire saving with solar energy.

Second big issue that I saw as a small business going through COVID was that data in our industry is extremely siloed. And a large degree of complexity from solar energy projects involves just organizing communications and making sure that everybody's on the same page with the right data. And the reason that this happens is because everything's siloed. It kind of goes back to what I'm pointing out with these PDFs. It doesn't allow for innovation in new companies to create more efficient solar companies, like kind of these service companies.

Going back to that 10 kW example. If we look at interconnection, building and electrical permits, structural reporting, state rebate applications, renewable energy credits, we find that we are largely entering the same exact information like four or five different times across four or five different

applications that are being sent to, like, four or five different e-mail addresses. And the problem is that we don't have an infrastructure, like a regulatory infrastructure, that's capable of connecting these multiple independent systems together, which causes our industry to be administratively complicated, labor-intensive and slow.

So if we want to turn around the solar industry, we need to focus on the things that make it where projects take too long to install. We want to focus on things where, if we can save labor hours and administrative costs, we want to do those things. We want to basically always be installing. We don't always want to be doing paperwork. The more paperwork we're doing, the less energy we're delivering to the state, and it ends up costing a lot of money. And it was something I worked on very heavily at Solar Endeavors, was how do I automate that system to take something that takes two hours and boil that down to five or ten minutes and have it in a

database. So it causes us to be slow. If we were to kind of have a shared platform, it's going to save us time and it's going to save us money. It's going to be easier to resolve administrative errors. So, for everybody, when there's something on an application or something like that, generally speaking, that error can be found across the applications. You have to go into each one and basically resubmit and do all that. And then there's the -- it reduces, once again, the need for unnecessary communications and costs.

And so if we were to bring together a specified team and develop a better shared system or a methodology, if you will, on how this information is going to be handled in the state of New Hampshire, it would allow for more growth. And price competitiveness will start occurring because all of a sudden you're lowering kind of the knowledge barrier for more people to create solar energy companies and provide a unique value set.

The final thing I want to bring up was our incentive programs are not competitive.

I think, yeah, we're ranked 41st. And this is really an important thing to think about, if we're talking about senior citizens who need energy stability, if we're talking about a family of four, where if they can save $150 off their energy bill, that feeds people when they need it the most. And solar can do that. But the issue is solar energy systems are expensive. Like I said, it's like 63 percent can't afford $500 bucks if their car breaks down. Solar energy is expensive. And we have an incentive program that does not drive the consumer enough to lead to energy transition. And more importantly, it bars New Hampshire families who generally need the most financial relief from solar. It bars them from being able to take advantage of that.

So SRECs are a response to that. I believe everybody knows how RECs work, in terms of 1 megawatt hour of verifiable energy, a price being determined by market's willingness to pay for them, the size of the market, consumers that are willing to

purchase them. And usually homeowners agree to sell them and all that.

But when we look about 40 miles south, Massachusetts dwarfs New Hampshire in terms of financial benefit as well. The only two things that Massachusetts and New Hampshire have in common with their programs is they suffer from the same paper-based, siloed data problems that the building permits and interconnection applications present, where we're just wasting time entering the same exact information on just a document that has a small, minute change to it. When we looked at really large companies, what we're starting to see is companies working with townships, utilities, regulatory agencies to create standardized templates of specific kinds of systems, like highest impact systems, that way you can have accelerated installs and things like that.

In terms of the RECs, we don't really have like the regulatory framework, the government legislation or even the correct technology required to levelize SREC prices

across state lines.

One more long-term thing that I would recommend when we're talking about how do we create a high-impact COVID-19 program that scales into the future of the grid when we're talking about more grid-connected devices and that accelerating. One of those long-term things is creating a very competitive REC program utilizing some disrupted technologies that are having a very high impact globally right now. And if you go to Portsmouth, we have some of the best developers in the world creating these technologies. The REC program, most importantly, would reduce cost barriers for families, would create new markets and job growth in the state. And it has the potential, if you were to use the right technology stack, it would have the potential to scale past New Hampshire. Very powerful stuff.

So if we were to bring people together and develop a more competitive REC program, state-of-the-art REC program that solves not only issues that we see in New Hampshire, but

a lot of these issues that are copied and pasted, we could allow for the average family to afford our products and services and grow our industry in a way that traditional utility companies can't really do.

I understand that these recommendations are not necessarily simple, but they're also not impossible. And our state has more than enough talent to make these changes happen. If we look at the Town of Portsmouth, or Unitil, we can see that we're already taking the steps necessary to achieve some of the goals that I just mentioned. We basically need companies to work together to create a symbiotic data relationship so we're all better off. Through the creation of that dedicated team, I think what you're going to see is the ability for different perspectives from different companies to look at the same problem and provide unique ways of innovating on that problem.

When we're talking about COVID-19, the entire planet shut down. And that should make the hair on your arms raise up. And we

need solar energy because solar energy is stable. The sun comes up every single day. It doesn't have the geopolitical stresses that I believe when we turn on the TV we all see going on right now. And so solar energy is a form of social stability, such that all of the costs associated with trying to maintain the other systems would slowly dwindle away.

The reason that I'm here is because I think that very small changes can have huge financial impacts for everybody. If we can save time when we are submitting applications, if we can have it where we have digital systems and big data can be used so we can have more intelligent decisions, this is the direction that I would like to see the industry go. And I would love to see somebody kind of pioneer that and assume a leadership role and make that happen. And those are the kinds of things that I was thinking about when we're talking about global pandemic, poverty, kids working from -- kids and remote. Like all these

different things are very powerful things. And these things are applied to every single state, and everybody is suffering this.

And everybody needs electricity. And we are more digital than ever, and our energy is coming from one centralized utility. And from a national security standpoint, I would have to push the ball forward and say not having energy diversity in our grid and developing a national global COVID-19 pandemic plan that doesn't think about energy diversity and the implications about having that are very serious, powerful things.

And so the reason that I'm standing in front of this Commission is because these are the things that, over the course of 2020, when the government was shutting down, these were the things that I was working on developing and trying to figure out not necessarily how do I help my company, but how do I position a product in such a way where the people who need it most can benefit the most from it. And if we can create a social safety net out of energy, the impact that

that will have on society, the security aspect that that will have on society is the type of investments that -- I'm 31 years old. Those are the types of investments -- when we're printing this much money, these are the investments that we have to make. These are assets that are going to pay off, and it is going to create immense value. Because that next generation that is going to come through, they're not going to have to worry about energy if we do these things. And that is one of the most profound ideas I've ever heard.

So, yeah, my name's Greg. I'm from Harvey Woods. You know, having been around for too long, COVID-19, definitely tough. But you know what? We are in probably one of the most important industries out there. No energy, this Zoom call never happens. And so making sure that we can protect that with solar energy, and maybe take a little bit of a different spin on how we view developing regulatory policies, how we work together in a competitive environment, how we work

together in creating standardizations and protocols like we see in Silicone Valley, we do that for energy. And I think that New Hampshire is uniquely positioned to take on that endeavor.

CHAIRWOMAN MARTIN: Thank you, Mr. Dubela.

MR. DUBELA: No problem.

CHAIRWOMAN MARTIN: Commissioner Bailey, do you have questions?

COMMISSIONER BAILEY: Yes, thank you. Just one quick question.

Thank you for your comments, and thank you for your concrete ideas on what we can do to help.

MR. DUBELA: No problem.

COMMISSIONER BAILEY: Can you tell me, are you working with the Legislature to create a more competitive REC program? Because that's not something in our jurisdiction. I'm sure you understand that; right?

MR. DUBELA: So I am not actively -- to be honest, what I'm most

concerned about right now is the first job that I was able to do, I was able to create a job for myself, a job for my engineer, a job for his deck hand, and a job for our master electrician. And just given the global environment right now, my No. 1 concern -- I did all of my development and preparing for all this stuff, I did that when we were locked down. Right now, I don't think that, from my company's standpoint, it's an appropriate investment. I think that I need to more focus on being a reliable source of income for my teammates before I try to take on something that is obviously going to be a multi-year thing. Like I said, this is my first time speaking at a Commission. This is the first time that I've kind of opened up the floodgate on some unique things that I've been working on and ideas. And I think that's a good place to start. But for right now, my primary concern is making sure that people have work.

COMMISSIONER BAILEY: Okay. Thank you very much.

MR. DUBELA: No problem.

CHAIRWOMAN MARTIN: Mr. Dubela, I don't really have too many questions. But I was impressed by your comments about sort of bringing solar together to resolve some of the inefficiencies that might exist in the industry. We can certainly consider your comments and look at what we can do here. But I wondered if you had tried to do something along those lines yourself with the industry, other industry stakeholders.

MR. DUBELA: What would that look like?

CHAIRWOMAN MARTIN: No. I just wondered if you had tried to do that and it was well received or if you hadn't tried yet or what --

MR. DUBELA: I haven't tried yet, mainly because a pandemic wasn't necessarily happening. But now, with COVID-19, I'm trying to view things in as collaborative of a way as possible and to just keep thinking of ways that my industry can help solve the issues.

In terms of like what that would look like, I mean, Ms. Martin [sic] came in with excellent data with the Synapse report. Mr. Weeks came in with a fantastic insight into commercial development in the Northeast, providing a lot of contrast from state by state. This helps regulatory agencies look at how to kind of create a path. Mr. Kilens is -- you know, he's a UNH local guy. Having local people involved creates movements, having his perspective on things. And Mr. Catania has, you know, financing experience, which is the No. 1 thing if we're going to do, like, really large-scale projects. So in this room alone, I think we have knowledge capital to make it where we identify what are we trying to do with the COVID-19 emergency plan. We're trying to help the most disenfranchised, the people who are looking at disadvantages that, you know, they need help with, and then we bring in a multitude of minds to attack that problem from their own unique domain. And you let collaboration happen and innovation happen on top of that,

and what ends up happening is, in terms of teams, you end up getting not only a really optimized solution, but it tends to be cheap. And I'm not trying to raise people's taxes. I'm from New Hampshire.

CHAIRWOMAN MARTIN: Okay. Well, thank you very much for your presentation. That was very helpful.

MR. DUBELA: Thank you, Chairwoman.

CHAIRWOMAN MARTIN: Okay. Mr. Froling.

MR. FROLING: Can everybody hear me? Well, my name is Mark Froling. I own and operate a small biomass energy company. So we are on the thermal side, not the electric side of things. And the Public Utility Commission has been a great friend to our industry. You guys have helped us grow this biomass energy field tremendously over the last ten years, with help through three different programs, residential, commercial rebate programs, as well as competitive grants as well. Also, you guys are involved in the Renewable Energy Certificate under

that program as well, and so you guys have been tremendously helpful. In fact, since 2004 I've been in business here. We have had -- and your program came in later. But since your program has come in, we've only done, in fact, two projects without the help of the Public Utility Commission. And I don't think we would be in business unless you guys were there because you are tremendously helpful to make these projects -- to sell the projects, as well as to support the ongoing operation of these projects through your grants and RECs. And so thank you so much, over the years, to provide that stability.

I want to dive right into the COVID impact because that is really the intention of this meeting. We are 90 percent commercially involved and 10 percent residentially involved. And the commercial side includes 80 percent of -- the commercial side is school-driven work, municipality-driven work, where we are working with school districts or individual

private schools as well. And also municipalities or county institutions as well. And since the COVID impact in March, really, we have lost -- from March until now, we have lost -- until today, we've lost exactly 24 percent of our sales. So it has had a really large impact on our company, possibly during the worst possible time, because we also made a very large investment into this field. We had started two years ago to develop a new facility in Keene, New Hampshire, and it took us a year and a half to do the engineering and the purchasing and procurement and the development of this project. And right as we went into the physical construction of the project, after all the purchasing and development was done, COVID hit and things changed. Sales dropped out. Schools were uncertain business. And it's had a lot of impact on how we see things now. Now, it's not all bad. But change is difficult, and so we had to pivot. The biggest impact is really the uncertainty of things. It is not so much that -- the

24 percent in sales, of course, is a tremendous hurdle. But it is the uncertainty of is there going to be business in the future or, you know, or, you know, will they buy our wood chips in the future. The uncertainty created by this COVID impact is really our biggest hindrance right now, and that is where I think the Utility Commission can really help us the most to overcome that uncertainty, because we are in a climate of a tremendous uncertainty and unknowns. And so having a steadfast hand on policy, on rebates and programs and funding of these things could actually help us tremendously sort of levelize our effort in keeping steadfast to help our potential customers make steadfast decisions and move forward.

It's really a trifecta of things that has happened for us. It can't always be pinpointed to COVID because it could be unrelated. We had falling fuel oil prices beforehand, and that has a very large effect on the heating side because people shift, pivot to the lowest cost of fuel very

quickly. Typically within a year or two, people pivot to the lowest-cost available fuel. And so four years ago, when liquid propane became extremely cheap, below a dollar per MMBtu, a lot of people shifted to that. And recently fuel oil has really dropped down. And with COVID, businesses have less certainty, and so the cost of oil is probably going to stay quite low for some time. So people are sort of firing up the oil boilers again and going away from biomass boilers that we of course are trying to sell. Strangely, we're still at about a 40-percent discount over oil. But with uncertainty, people stick with what they have rather than starting new projects.

To make things worse, our increase in overall costs has gone up because of additional work we have to do to be safe. You know, there's additional cost in PPE, in rental lifts. Because we can't have so many people on the lifts, we have to have individual lifts for each person now. So even for the projects that we just finished

this year, the margins have gone way down because of these additional costs. Transportation costs because we don't want to have so many hotel nights, so we're driving back and forth. We have more transportation because we don't want to have several drivers in one van, things like that. So all of these individual things have come back to -- have come together and created sort of the perfect storm, not in the right direction, unfortunately, and made this business quite difficult when we were hoping to actually turn things around a little bit.

I will say that a I'm huge fan of the PUC because you guys are underwriting every single project that we're doing. And of course we utilize you guys on every single project. And what I would hope to convey today, even though business is hard and it looks pretty uncertain for the near future, is that you can really pay attention to funding the current programs and keeping a steadfast hand on the funding and these programs rather than shifting things up and

down, because really the uncertainty of things right now is so high, that if we have uncertainty in the planning of things, that could make things even more difficult.

So that is my message for today. I'm obviously happy to answer any questions that you guys might have as well.

CHAIRWOMAN MARTIN: Thank you very much, Mr. Froling.

Commissioner Bailey, do you have questions?

COMMISSIONER BAILEY: No. Thank you very much, Mr. Froling.

MR. FROLING: You're welcome.

CHAIRWOMAN MARTIN: I do have one question. I think it probably applies to everyone, but in particular to your industry.

Are you still -- I believe there's been some issues with equipment impacted by COVID and the ability to get the things you need to do your projects. Is that still the case, and do you think it's going to improve?

MR. FROLING: Well, yes, that's a good question. So our lead times, we have a

lot of equipment coming from overseas. Even though the fuel is local, most of the expertise equipment is really, actually European-driven at this point. And so we've had much longer lead times for parts and pieces to bring the projects together. That has put a lot of stress on sort of the financing of the projects because we might have a -- in some cases right now, we've had six months' delivery times from, you know, purchase to a boiler seen on site. So we've seen extended situations there. Parts and pieces from companies that are in a lockdown right now, especially I know specifically on one boiler that is supposed to get parts from Germany right now, and we're looking at four months to get these parts. That'll certainly put us out of the heating season. Yes, we do have a backup boiler there. That's not a problem. But those are additional stresses that have been put upon us this year as well caused by COVID.

CHAIRWOMAN MARTIN: Okay. Thank you, Mr. Froling, for your comments today.

MR. FROLING: You're welcome.

CHAIRWOMAN MARTIN: Okay. Morton Bailey.

MR. BAILEY: Hello. Can you hear me okay? Great. I'm Morton Bailey. My company, Lyme Green Heat, is a wood pellet fuel company. We basically sell and install fully automated wood pellet heating systems that utilize bulk wood pellet storage. And then we have a fleet of delivery trucks delivering wood pellets out, just like oil is delivered. So we literally take a truck and hook a hose up to a bin in someone's basement, or to a silo outside in commercial applications, and blow those wood pellets in. So we act very similar to your traditional heating oil company.

I employ ten individuals between heating systems, service and installation, and the delivery of wood pellets. The COVID-19 crisis has -- we've seen the impact largely in the springtime with the initial -- or late winter with the initial shutdown.

One big impact that we saw from

that was the closure of all industry trade shows, home shows, those typical springtime/late winter events that allow us to get into the public, meet with contractors and homeowners who are looking to do new building projects and update their home infrastructure. That is a very common place for us to do business. We found all those shows shut down. So of course that created a barrier to our initial lead funnel coming into the summer. We were fortunate to have a good book of work from 2019 feeding into 2020, so we were able to stay busy, keep our staff employed. We had no period where we could not go out and continue to bring in some revenue and keep our business going.

We saw a fairly large impact on our trucking end of our business. Our heating fuel season continued as normal, but in the off-season we have to kind of find trucking work for our driver staff. So it's anything from hauling, you know, flatbed commodities to running dump trailers behind our trucks to construction sites. We saw that business

come into it very slowly from the spring to the summer, particularly at the construction end of things. It was just a very slow start. So we weathered okay.

My biggest concern is actually 2021. I think we're going to see, from our business standpoint, the larger impact in Q1, Q2 of 2021 just due to the fact that our sales development got cut short last year. And then, of course, coming in to when schools go back in session and everybody started to kind of contract a little bit, stay home, stay isolated, that's where we saw our sales leads start to drop again as we kind of came back into the winter season.

So from our perspective, what we're really looking to see from the Public Utilities Commission is a continuation of the rebate program that we've had going for several years, as Mr. Froling had mentioned. The PUC has been a good friend to the wood-heating industry in New Hampshire. We have benefitted greatly from your ability to create these rate base programs and

administer those in a very timely fashion. We did find some lack of clarity this fall with some legislative changes that impacted the PUC's ability to process new applications and send out rebate funds this fall, and we did see an impact in business from that.

From a heating system standpoint, installation, kind of your World Series of the year is from September through November. And that became a very challenging time, having some uncertainty on what our rebate programs would look like.

So what we would really love to see is just a general continuation of the funding levels that the PUC has had for fully automated wood pellet boilers for residential and commercial use. So, both the commercial and residential programs. We feel that wood energy in New Hampshire is a job creator. It's a job driver. So as I think you all know, 80 cents on the dollar for heating fuel in New Hampshire typically goes outside the state, where with wood fuels we're keeping the majority of that money within the state.

And we're seeing, you know, the trickle-down effect from the end user to the fuel delivery company, to the transportation company, to the forester, the logger and the landowner. So we see our industry as an important part of New Hampshire's forest industry, which is a major part of our economy here in the state of GDP. So we're really hoping to see some consistency.

Again, speaking to other's points of having these programs in place, specifically rebate programs here for us in the biomass industry, having those in place and firm and cemented is extremely important for our sales leads. A homeowner in New Hampshire has somewhat become accustomed to seeing these rebates. When we see a short-term drop-out like we saw this fall, we can lose people's attention pretty quickly. So having that rebate there consistently, knowing that the funding is going to be back, is hugely important for us.

And I think coming into 2021, year 2021 is when we need that security almost

more than any other time. As Mr. Froling mentioned, oil prices have continued to decline. We're hoping to see that come back up again. But we need to create that certainty within the market in order to continue to grow, add employees and community -- support our community partners from the forest industry. So that's kind of where we're looking to see things. As I said, we didn't see direct major impacts in year 2020 from COVID-19. I just think we're going to see the lingering effects. And that's where, you know, strong businesses creating jobs are going to be essential to keeping our economy moving well.

So that's kind of my comments. I totally appreciate you guys having all of us come in and talk about this, and glad to answer any questions.

CHAIRWOMAN MARTIN: Okay. Thank you, Mr. Bailey.

Commissioner Bailey, any questions?

COMMISSIONER BAILEY: No. Thank you, Mr. Bailey.

MR. BAILEY: Thank you.

CHAIRWOMAN MARTIN: I do have one question. The source of your pellets, is it primarily New Hampshire?

MR. BAILEY: That's correct. Our pellets are sourced from New England Wood Pellets in Jaffrey, New Hampshire.

CHAIRWOMAN MARTIN: Okay. Thank you.

And I did want to say, for you and everyone else, this has been incredibly helpful to hear from you about rebate programs, how those function in your business. I found that very, very helpful. So thank you.

MR. BAILEY: Thank you so much.

CHAIRWOMAN MARTIN: Okay. So Commission Staff, were you planning on speaking today? Mr. Wiesner? Ms. Cramton?

MR. WIESNER: I don't think we had any prepared remarks or particular agenda, unless Ms. Cramton disagrees with that. Not sure we're prepared to respond to what we've heard this morning.

I do want to express our appreciation as well for the wide-ranging comments that we've heard today from different industry sectors of this important industry. It's given us a lot to think about. I will note that some of the issues we've raised today are going to be considered in other dockets, such as grid mod, EERS, the electric vehicle time of use rate docket, and of course net metering. And we still have an open and active docket to consider net metering, 16-576. And certain issues like the value of solar, net metering compensation levels, the threshold demarcation between large and small customer-generators, all of those will be actively considered and probably actively litigated within the next year to year and a half. So I just wanted to state that for the record.

I also want to say that some folks couldn't join us this morning, and I think we would have heard more from the thermal side of the industry if those folks had been able to join us. So we do recommend there be an

opportunity for written comments to be submitted within say the next two weeks. And if we were to set a target date of January 22nd, I think that would provide people with a reasonable opportunity to submit further written input for this docket.

CHAIRWOMAN MARTIN: Great. I think that's a really good suggestion. So let's go with that. If anyone would like to submit comments by January 22nd, that would be good. And if you have comments that were written from your presentations today that you would like to submit that's great, too.

I wanted to -- before we close, Mr. Weeks had put a few things in the chat. And I don't know. Mr. Weeks, are you still here?

[No verbal response]

CHAIRWOMAN MARTIN: Okay. I was going to give him an opportunity to put those into the record. I think he's gone. He can submit those in his written comments if he'd like.

Okay. Does anybody else need to be

heard?

Commissioner Bailey, anything?

[Commissioner Bailey indicating in the negative.]

CHAIRWOMAN MARTIN: All right. Well, thank you, everyone, so much for your comments and time today. It was really educational and helpful. And if we have nothing else today, we will adjourn. Thank you. Have a good day.

COMMISSIONER BAILEY: Thank you, everyone.

(Whereupon the hearing was adjourned at 11:15 a.m.)

C E R T I F I C A T E

I, Susan J. Robidas, a Licensed Shorthand Court Reporter and Notary Public of the State of New Hampshire, do hereby certify that the foregoing is a true and accurate transcript of my stenographic notes of these proceedings taken at the place and on the date hereinbefore set forth, to the best of my skill and ability under the conditions present at the time.

I further certify that I am neither attorney or counsel for, nor related to or employed by any of the parties to the action; and further, that I am not a relative or employee of any attorney or counsel employed in this case, nor am I financially interested in this action.

(ORIGINAL CERTIFICATION FILED WITH PUBLIC UTILITIES COMMISSION)

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Susan J. Robidas, LCR/RPR
Licensed Shorthand Court Reporter
Registered Professional Reporter
N.H. LCR No. 44 (RSA 310-A:173)

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