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REP. ARCONTI (109TH): Okay. Thanks. Well, good morning, everybody. I'd like to convene today's Energy and Technology Committee public hearing. Before we get started, just want to remind Committee Members tomorrow morning we're doing that virtual coffee hour with PURA at 10:00 A.M. Will is gonna resend the link out at some point today and for Members of the public, out of respect for everybody's time, the Clerk is going to hold everybody to the three minutes of testimony. He will let you know when you have about 20, 30 seconds left, so you can begin wrapping up your thoughts. And then after your three minutes, we will open it up to Committee Members for follow-up questions.

So, we will start with the DEEP team. And then right after DEEP, we're gonna call on PURA. And then after PURA, we'll go back and forth between Members of the public and public official list. So, who I have for DEEP, Commissioner Dykes, Deputy Commissioner Hackett, and I think I saw Mike Li on the list? We can let Mike Li in, Will, for this part. Commissioners Dykes, you have the floor whenever you'd like to start.

CMMR. KATIE DYKES: Terrific. Great, thank you so much. And good morning, everyone. Senator Needleman, Representative Arconti, Senator Formica, Representative Ferraro, and Distinguished Members of

the Energy and Technology Committee. Thank you so much for the opportunity to testify today.

My name is Katie Dykes. I'm the Commissioner of the Department of Energy and Environmental Protection. And as you mentioned with me today, our Deputy Commissioner Vicky Hackett, and our Bureau Chief of Energy and Technology Policy, Mike Li. I will be brief so that we'll have time to answer any questions you may have.

We have submitted written testimony on a number of Bills. I just want to take a moment to highlight our testimony with respect to Senate Bill 882, which is AN ACT CONCERNING CLIMATE CHANGE MITIGATION AND HOME ENERGY AFFORDABILITY. These are both Governor's Bills, and we appreciate the opportunity to speak to the merits and strengths of these Bills, which we think will go a long way to helping achieve our aims of continuing our progress of reducing carbon emissions from our electric grid and doing so in a way that promotes affordability for repairs all across the state.

The first part of this Bill seeks to codify the target of a zero-carbon electric supply by 2040 which Governor Lamont highlighted in his Executive Order No. 3 issued in September, 2019. We think it's very important as we contemplate pathways to achieve 100% zero carbon electric supply that we know that these goals are feasible and achievable and understand how they will impact reliability and to repair costs. And so, Governor Lamont's Executive Order directed DEEP to study pathways to achieve this goal in the integrated resources plan that DEEP undertakes.

We released a draft of that plan at the end of last year, and it confirms that through extensive modeling that achieving a 100% zero carbon electric supply by 2040 is feasible and achievable. And in fact, we are already well on our way towards meeting that goal already.

Certainly, it is necessary for us, you know, first to step back and explain why we think it's important to have this goal, and especially why it's important to enact it into statute is because not -- we want to ensure that we have a strong benchmark that can inform the planning that's done for meeting our electric supply with decarbonized sources both across the work that DEEP does. I believe that this would be helpful for PURA's adjudicated proceedings to have this type of a goal and statute. It all flows from a requirement that we already have in statute to achieve a 45% reduction in greenhouse gases economy-wide by 2030.

So, having this benchmark in statute will help give both the current administration and future state leaders clear planning, benchmark to work around as far as what contribution towards that economy-wide goal the electric sector should provide. But again, it's the draft IRP highlighted. There are a variety of pathways to achieving a goal of a zero-carbon electric supply by 2040. We've already made substantial progress towards meeting this goal through the investment in over 600,000 megawatt hours per year of operating grid scale zero emission renewables, as well as the retention of the Millstone nuclear facility, and combined these -- the procurements that have already been completed, provide the equivalent of about 65% of the electricity consumed by customers of the states to utilities coming from admission free resources.

And by 2025, we expect that percentage to increase to 91% as new offshore wind and grid-scale solar projects that have been contracted, but not yet constructed will come online. So, we believe that based on that progress, achieving 100% goal is feasible, and enacting this into statute will give a clear planning signal for -- that is critical for how to continue to maintain these high levels of emission free resources going forward from the mid-2020s to the 20 -- up to 2040.

So, the second part of the Bill is important companion piece to that 2040 zero carbon supply goal, which would give DEEP the authority to solicit proposals for up to 300,000 megawatt hours or 100 megawatts in the aggregate of a combination of active and passive demand resource response measures. These are passive demand response measures include energy efficiency measures that are designed to save electricity and lower costs for repairs by reducing demand across many hours. The intent of this Bill would be to work in harmony and supplement the programs that are already available through the conservation and load management fund.

The Bill also includes procurement authority for active demand response measures. These include innovative programs to allow customers to play an increasingly active role in the energy system and to get financial rewards for doing so by reducing their demand at key times. As we highlighted in the integrated resources plan, we have made great strides across the New England region in deploying more renewable resources. And we need to ensure that we are complementing those renewable resources with resources like energy storage and demand response, which we would have the authority to procure through this provision that will ensure that we can meet our energy supply needs with emission free resources, as much as possible when the sun isn't shining, when the wind isn't blowing. So, this is a critical driver for achieving an emission free energy supply all hours of the day.

The third part of this Bill puts more control over energy use into the hands of consumers. It requires property owners to provide information about a home's energy consumption to potential renters and buyers. Property owners can either provide the last 12 occupied months of energy use and costs, or they can provide a home energy label such as a home energy score, which acts like a miles per gallon rating for a home. And this information gives

energy consumers, the power to choose to live in a more efficient home.

DEEP supports this effort, which will provide transparency to potential home buyers and renters about the energy consumption of a home, so they can accurately assess the cost of renting, leasing, or buying the property by choosing a home that they can afford to heat and cool. The proposal also gives an incentive to property owners to take advantage of Connecticut's award-winning energy efficiency programs to increase the energy efficiency of their homes and buildings. For many residents in our state energy bills are the highest annual housing costs outside of mortgage payments or rent.

The DOE estimates that on average energy costs annually for a single-family home in Connecticut is approximately \$3,600 dollars, the second highest in the nation. And this signals that energy information is a critical variable in addressing housing affordability. Because it's hard to perceive the degree of insulation or the efficiency of appliances when you're walking through a home or an apartment and considering renting, these -- this type of information will make those values, those attributes of a home more transparent for everyone, and we think that that's going to really drive investment and increase --enhance the value around energy efficiency investments.

We have also heard from landlords, from real estate investors about the value they see in this proposal which will provide them more information about utility costs and the relative affordability of rental properties which is key for having predictable income and on time payment of rent. We also know of some -- real estate investors have told us that tenants, their most frequently asked question is about what the utility costs will be for a rental property. And so, this gives them information to be able to respond to those questions

for the first time for tenants who are considering renting.

So, given that Connecticut is currently experiencing some of the highest number of home sales in over 50 -- 15 years, now is a really critical time to ensure the energy information is available to buyers. We know that -- we've heard that due to increased demand, meaning the home sales prices have been rising and the transparency this proposed Bill provides will allow residential customers to make housing choices that they can afford.

There's so much more to say about the benefits of this program. I was pleased to join Governor Lamont earlier this week and talking about the advantages of this program. We want to assure, I think it's important, given this Committee's strong interest in support for the state's conservation and load management program. It's also important to emphasize that the availability of a whole broad range of different energy efficiency benefits, low cost or low interest or no interest loans, and other grants and rebates that are available to property owners that will help them drive investment in energy efficient homes.

So, with that, I want to turn also briefly to highlight that DEEP supports many aspects of Senate Bill 952 as well, AN ACT CONCERNING CERTAIN SOLAR ENERGY PROJECTS. We commend the Committee for raising this important Bill. Again, as we noted in the draft and grade resources plan, solar energy resources, and behind the -- behind the meter, our resources contribute greatly towards our ability to meet our decarbonization goals, to help lower costs for customers and achieve an affordable, clean, and modern electric distribution system.

This Bill authorizes DEEP to solicit proposals for energy storage projects connected at the transmission or distribution level. DEEP supports this section as a tool to help state -- the state

reduce greenhouse gas emissions. Again, as I highlighted with respect to demand response in the Governor's Bill, so too, with this section of Senate Bill 952, I commend the Committee for providing this support for investment in resources like storage that will help us integrate intermittent renewables with emission free resources.

DEEP also supports the approach of increasing the cap for virtual net metering by \$10 million dollars. We appreciate the Committee including some designations around prioritizing municipalities that would be able to receive those important benefits from virtual net metering program. We think that this is a wise approach during the transition period to the successor tariffs being developed by PURA.

There's so much more to comment on here, but I also want to just note section six -- I'm sorry. That the -- we appreciate the Committee's efforts in section six and section seven to support more transparency around how the municipal utilities are making progress towards achieving what is a statewide mandate to reduce carbon emissions economy-wide 45% by 2030, 80% by 2050.

DEEP has been working very hard through our IRP and we applaud PURA's efforts within their jurisdiction to ensure that there is a forward progress in the electric sector that we have oversight over to achieve these -- the mandates of the global warming solutions act. And it's imperative that our municipal utilities are also making such quantifiable progress, especially when we know that investment in emission free resources brings great benefits to ratepayers across the state.

So, we appreciate what this section would do to help share the progress that municipal utilities are making in this regard. And DEEP is committed also to an expedited permitting process for solar energy systems. I think it highlights the benefits of having a merged agency with an environment, natural

resources, environmental quality, and energy planning under one roof that we have the expertise within our department to engage with stakeholders on ways to improve the effectiveness of our -- of our permitting processes. We would also look forward to working with stakeholders, including the department of agriculture in this process, which we committed to doing in our draft integrated resource plan.

I want to just pause there. I believe -- I guess the last thing I would highlight is with respect to the provision in section five of this Bill, which I acknowledged that DEEP does not support this section would allow for electric distribution companies to own solar power generation facilities of up to 150 megawatts. We obviously are very strong supporters of investment in renewables and including solar facilities to help meet 100% zero carbon electric supply, but we have a strong commitment to open competitive processes.

It's the best way to drive those investments in a way that supports businesses that have developed across our clean energy industry here in the state that are delivering solar projects as the best way to ensure that ratepayer investment in renewable resources is accomplished in the most affordable way.

We have direct experience November 2011, the state experimented with utility ownership of solar when we authorized section 127 of Public Act 1180 and that created a separate lane for the utilities to propose and purchase solar projects insulated from competition from third parties. And the pricing that came in from those projects was much higher than those projects that were procured through an open competitive process.

We also would have some questions around the ratepayer's risks that would be incurred with respect to development costs and other things that currently third parties bear those costs. In



this configuration we are concerned that those costs would be borne by ratepayers, but we're always eager to hear from the Committee or work the Committee on achieving our respective goals. And so, with that, I appreciate the opportunity to highlight some of those provisions in our -- in our written testimony and happy to hear any questions that the Committee might have.

REP. ARCONTI (109TH): Alright. Thanks Commissioner. So as always Committee Members just use the raise hand function, and I will call on you, my best attempt to get you guys in order as I see the hands pop up. But first I do want to kind of walk-through Senate Bill 882 with you Commissioner, if that's okay. Just starting off with section one. When it comes to right, our infrastructure here in Connecticut, our generation infrastructure, what exactly does codifying this goal mean for exist -- existing infrastructure, like combined heat sources that manufacturers and hospitals use? You know, we're here from Kimberly-Clark a little later today on another Bill in regards to the class three market and, you know, fuel cells. You know, infrastructure like that, what would codifying this mean, you know, as 2039 rolls around?

CMMR. KATIE DYKES: Thank you for that question Representative. So, we have -- first I'll note that we do -- we are supportive of the Bill that would provide for more support for combined heat and power. I know that that's another one before the Committee today. We highlighted this precise issue in our integrated resources plan. We recognize that programs like our renewable portfolio standard, which support fuel cells, anaerobic digestion, waste to energy, as well as combined heat and power cogen -- cogeneration facilities, all serve important public policies and have some emissions associated with them.

So, we identified in our IRP that the benefit of a long-term program is that, you know, setting a goal

out for 2040, which is 20 years from now, gives us the time to look for and scale up those opportunities as technologies evolve to prioritize and make progress towards gradually reducing the emissions associated with public policy supported technology.

So, for example we highlighted in the -- in the IRP, we're currently working on efforts in, through the Connecticut Coalition for Sustainable Materials Management that are supporting more diversion of municipal solid waste. We've asked the utility for -- sorry, the utility -- the Committee for authority to procure renewable natural gas as opposed to electricity from anaerobic digesters, which can play a role in reducing reliance on waste to energy facilities. These types of transitions take time.

With the respect to the fuel cell industry, you know, we are very bullish about the future of hydrogen. I expect over the next two decades before this target would come into play that we're going to see dramatic leaps in the transition and the low -- the reduction in the cost associated with high -- renewable hydrogen power fuel cells, for example.

So, this is why we think that it's wise to include, to have this target, but with a date of 2040 because it gives that space. It gives a clear planning direction for us to -- a North Star for us to work towards while we, you know -- look while technologies evolve and we look for ways to optimize for emission reductions in our supply over that time.

REP. ARCONTI (109TH): So, I said in other presentation earlier in session with Napco on -- with former Energy Secretary under President Obama. You know, and even in his, you know, pie charts and graphs going into the 2040, 2045, 2050, even at his pie chart, he had, you know, up to 15, 20%, if I'm remembering correctly of, you know, natural gas generation still part of the generation transmission

system for reliability purposes. So, what would this mandate in statute from, I guess, DEEP's perspective do in terms of the reliability of our grid?

You know, I, for one, I know we talk all the time about the need to start building out our transmission system to incorporate all the gigawatts that will be necessary to meet these goals in terms of offshore, wind, and even creating that super highway of transmission across the country that that's needed.

So, I guess that's the question on, I haven't seen, you know, the various grid operators across the country really put forward a transmission plan. And then on the reliability of the grid considering -- you know, as I read section one, it's a pretty hard mandate. I'm not a lawyer, so I don't -- I'm sure we'll hear from other people testifying today on their thoughts on that, but I just wanted to get some of your thoughts on that.

CMMR. KATIE DYKES: So, this 100% goal it's styled in similarly to the way that our renewable portfolio standard works, which is to ensure that 100% of supply is matched by zero emission resources. But we recognize that that -- so it's styled that way intentionally recognizing that we want to ensure that we're meeting our supply needs on an average annual basis with a zero emission resources, but reflecting that we also operate -- you know, Connecticut is situated within a regional grid.

And so, we want to ensure -- you know, we recognize it in some of the different modeling that's been completed that our targets here in Connecticut are all affecting and have to be looked at in the portfolio of the respective targets that will be implemented across all six states.

So, I think that that's, you know, where we're very focused with the -- at the regional level we have

been working hard with the other New England states to reach consensus on reforms that need to be made to our markets that we share at the regional level. We issued a -- the five of the New England Governors issued a statement last fall calling for reforms to our markets as well as an emphasis on more proactive transmission planning across the region.

And that was followed up by a vision statement issued by Nescos, which all six states participate in to advance those types of reforms. And that can include that we have an emphasis on ancillary services markets as well as improving our energy markets so that we can ensure that that resources that are needed to ramp up and supply reliability during, you know extreme weather events are going to be available to run. But this signal with 100 -- as well as ensuring that the transmission build out there, we need to better integrate reliably on the renewable potential on our system is going to be proactively and cost-effectively developed.

So, having this 100% zero emission supply requirement here in the state will ensure that we're continuing to make that progress routing and increasing emission free resources, similar to how our RPS operates. That coupled with market reforms at the regional level, will ensure that that progress is nested within a regional grid that operates reliably and prioritizes emission free.

REP. ARCONTI (109TH): So how do you account for -- do you got -- does DEEP have, when it comes to emissions, an accounting standard on how this will be measured going into the next 20 years if this became statute?

CMMR. KATIE DYKES: I think that the integrated resource plan provides that kind of a tracking mechanism similar to how our RPS functions as well. We have made strides, for example, in ensuring that the nipple GIS system tracks zero emission credits from nuclear resources and others. So again, we've

had great success with our implementing RPSs across, you know, across the New England market. We are working on aligning our greenhouse gas accounting with the methodology, you know, to reflect this \$100 dollars zero emission goal. So -- but it would largely build on that type of a tracking mechanism.

REP. ARCONTI (109TH): Okay. And I do want to pivot to section two, if that's okay, and kind of piggyback off of what you were talking about, the Nesco, you know, vision statement and your work on that -- and DEEP work on that. I do want to ask the question -- I just do want to commend DEEP with their work, with the Nesco vision statement and partnering up with the six other states in our -- in the New England region. I know that wasn't easy to, you know, hurdle all those cats and get everybody, you know, kind of rolling in the same direction. So, we're all looking forward to some updates on that.

But you know - you know, in front of this Committee I think you've really laid out really well the issues with, you know, paying no double capacity and ratepayers paying twice. In my concern, my -- I'm nervous just with section two, that we are sort of not doubling down with going along the lines of the same policies. We've been doing the PPAs outside of the markets, and then putting more costs potentially on ratepayers going this route. So, a question I have is how long would it take for the market to respond? Now should you guys get this authority and procure, how long would it take for the ISO market to respond to the passive demand response?

CMMR. KATIE DYKES: Well, thank you for that. So first I'll say that unlike some of the state sponsored renewable procurements we have -- that have been in -- whose bids have been mitigated in the -- in the capacity market through the application of the MoPub we, you know, we have had better progress over the years in having passive demand, response energy efficiency investments

factored in, in the -- in the foreign capacity market into the load forecast and essentially where the ISO has reduced the amount of -- the calculation of the amount of capacity that each state area -- that region needs to procure based on investments in energy efficiency.

So that's good news, but the most important news is that you know, through this vision statement effort we have the best chance than we've had in many years to overcome these barriers that have been erected by the ISO in New England and here, and endorsed by FERC previously to resources that are procured through state sponsored contracts, being able to be counted in the capacity market.

And I feel very confident or more optimistic, I will say, than ever before that those barriers will begin to come down perhaps under new FERC leadership. I'll say that they were raised for the energy efficiency procurement and this Bill would be the same -- would also apply to the storage procurement that is highlighted in the solar ph. Bill. So, our -- in Senate Bill 952, and it's our expectation that we have to move forward through this vision statement process to remove those barriers rather than having that halt our progress and continuing to procure emission free resources that can integrate renewables.

REP. ARCONTI (109TH): So, I think, I don't know if I'm remembering correctly, the four-capacity market, it's two or three years? Is that how long it would take for them to -- for the market to recognize?

CMMR. KATIE DYKES: So, the -- right, so the -- forward capacity market procures resources, two to three years out but recall that, you know, the -- in the calculation of the amount of capacity that's needed for those forward capacity markets options, energy efficiency is factored in and taken off the top to reduce that, but that installed capacity requirements. So, for energy efficiency it's

actually, you know, we encounter less of a barrier than we do with renewable procurements.

So, it's, you know -- and it takes a little bit of time for these procurements to be underway, but I feel pretty confident, again, that the -- A we're working to change the market paradigm, B it's imperative that we have these resources in place to both energy efficiency and storage to help ensure that we can better integrate renewables with emission free resources. And I think that we shouldn't pause on procuring resources that are gonna save ratepayers money because of barriers that the ISO has put in place to date. Our goals should be to remove those barriers so that these cost-effective resources, emission free resources can be deployed and start saving us money across the state.

REP. ARCONTI (109TH): Okay. I don't think I have questions on section three and four, just more of a -- I guess a statement. I don't know which lines -- I have so many screens up. I don't know -- I don't have the Bill out. I don't know -- I don't know the line but, in the sections, it would allow, you know, the homeowner/landlord to reach out to the utility free of -- free of charge. Essentially the utility would have to provide this information to the homeowner or landlord to then provide to the renter or purchaser so they have a better idea, you know, more transparency on the -- on the costs of the home or apartment.

But I did notice that the tech -- any -- the technology utility would use or invest in would be, you know, eligible for cost recovery. I'm not sure I can support that right now. I like to kind of maybe go into that with DEEP offline, you know, if possible. Because if we're trying to save -- if the goal of section two and three is, you know, energy affordability, I don't -- I'm aware of existing utility law and regulation, but I just don't think it matches up.

And then I'm not gonna, you know -- you know, we -- we've talked at length on revenue decoupling and I still would like to see reforms there. Maybe we can talk about making some potential reforms to energy efficiency, you know, revenue decoupling for the utilities, you know, offline. I would like to see some of the risks shifted away from ratepayers onto the utilities that would really, I think, bring home the cost savings that, you know, we're talking about for energy efficiency for ratepayers.

You know, we've been investing in EE for a decade now, and I've never received more emails than I have the last six months on the cost of energy, you know, in this state. So, I like to make some reforms there if possible, with, with DEEP. But those are my more comments than question, but I would -- I know Sarah Needleman has some questions, so like to turn it over.

CMMR. KATIE DYKES: Yep. And we'd be happy to follow up with you and look forward to working on all of those topics.

SENATOR NEEDLEMAN (33RD): Thank you Commissioner, Deputy Commissioner and thank you Representative Arconti. Just to mention, David asked all the really relevant questions with regard to most of this, can I just ask for the public what exactly is a practical example of demand response reduction?

CMMR. KATIE DYKES: Sure. So, there are -- there's a -- this is a really fast evolving sector. Again, to the extent that we can activate demand reduction on the customer side to avoid either higher emitting or higher cost energy at critical times. It's you know, this can be incredibly impactful. Historically, you know, a lot of the quantity of demand response, some has traditionally been, for example, I know you you're familiar as a -- as a business owner working -- you know, giving a manufacturer, for example, the opportunity to defer some of their energy usage during peak times in



order to achieve and being paid to do so. That's a kind of traditional example of demand response.

But we know that as we advance with more smart appliances and, and a more interactive -- a more interactive and modern grid we can -- we can see demand response programs delivering value for all kinds of ratepayers, whether it's thermostats that can be in aggregate dialed down imperceptibly that can have a major -- that can be a major source of reduced load that can provide benefits to the grid and also save repairs money. Heat pump, hot water heaters are appliances that can be programmed, again, to make these kinds of modest reductions in demand at critical peak times that can help customers and, or ratepayers say -- save money.

So again, I commend PURA on their progress. So, with equitable and modern grid proceeding to -- which will drive, I'm confident, a more investment and a distribution grid that can be -- where these types of demand reductions and integration of smart meters, smart appliances can be better visualized and operated by the utilities that opens up tremendous value for ratepayers and avoiding the costs and avoiding lots of other energy costs on the grid. Hope that answers your question.

SENATOR NEEDLEMAN (33RD): Sort of. So, I just -- I kind of understand it in the current model in past years, it meant the utility would have the ability to turn you off, basically if they needed. It -- or, I mean, how did -- with smart appliances, smart technology, you'll be able to go in and scale back thermostats and stuff, but up until now it's pretty much been on or off. Right? Whereas there have been -- has there been some technology around that allowed you to, you know, if a -- if a Walmart during closed hours was kept at 72 degrees, could they set it back to 74 or 76 during the summer?

CMMR. KATIE DYKES: Right. So, there's a whole variety of different programs that have been, you

know, tested and piloted over the years. Again, the hallmarks of all successful programs is that they're voluntary for customers to often too, and that customers have the ability to opt out whether it's at the program itself or of specific demand response events, but I'll turn to, if you like, our team for more detail on that.

SENATOR NEEDLEMAN (33RD): Yeah. And it's for -- just a learning thing for the public what it is, I generally support it. Obviously, I have some security concerns about permission granted, and then at other points, no permission granted, but I'm not that cynical at this point. I think that we need to do this to shave off peak demand at certain times. I just think that it needs to be clearly defined when somebody can do that. And what I would not want to see happen here is that large businesses by, you know, all of the data center conversation by picking generators so that they sell demand and arbitrage back to the grid and turned their generators to keep running. I can see scenarios where that might not be the ideal scenario or may cause more harm than not.

CMMR. KATIE DYKES: Sorry, I'm sorry. And the beauty of the procurement authority --

SENATOR NEEDLEMAN (33RD): No, no, no.

CMMR. KATIE DYKES: Around this is that we can set criteria and eligibility for these programs. Certainly, as the Commissioner of Energy and Environmental Protection, we want to ensure that we're not increasing NOx emissions and contributing to more air pollution in our communities by virtue of pursuing a reduction in electric usage from the grid. So, we have the ability to ensure that there -- we don't have those kinds of unintended consequences through the exercise -- you know exercise -- initiating procurements under this type of authority. But yeah.

SENATOR NEEDLEMAN (33RD): And so, let's go back to part one of the greenhouse gas Bill 2040 rolls around. I mean, it's really not very far off, although, you know, it's fast. It gets here faster than we think, obviously. I still remember celebrating the turn of the millennium and here we are in 2021 and it was like 10 minutes ago that it felt like we did that. There's a lot to be done. I know that, you know, we have a lot of wishful thinking around reforming ISO, but as we get to 2040, we don't have a guarantee that it's going to reform. Administrations come and administrations go with different priorities.

I just want to make sure that we're not selling ourselves down the river with some of this, and we're going to still have all of -- all of the generation both old and, and not so old in the state that is fossil fuel based. And we're going to pay all the extra money for the renewables. And yet ISO, you know, still hasn't really telegraphed that there's going to be a regional commitment to carbon reduction goals in a way that makes me feel like we're not going to get whacked through decoupling. That -- that's a statement, not a question just from my own.

You know, as we said, policy here and put in a hard and fast state I think you might remember -- I think it was last year or two years ago, whenever we talked about this. It was -- I'm personally willing to work towards this. Not sure I want to box us in completely. I want the goals. I just don't want to under all circumstances when not all technologies are fully developed yet. If, you know, we -- what represented of our county said is what I've heard. That experts think that even by 2040 or 2050 there's going to be a significant amount of natural gas generation out there. Do you think there's any pack based on known technologies to actually not have that and have it been affordable?

CMMR. KATIE DYKES: Well, first I want to say, you know, with respect to reforms of our markets, I'm not -- I'm not just wishful about it. We are -- we are laser focused on ensuring that it occurs. And I think that the progress over the last 12 months, and you know, where you see this vision statement reflecting is not just Connecticut, but all six New England states that share these concerns and this prioritization of making these reforms, improving our transmission planning process, strengthening governance. You know, I think that that is -- reflects a lot of momentum and a lot of promise for getting these changes in place. I think that what we've been hearing coming from the Federal Energy Regulatory Commission and from the Biden administration is commitments to as, you know, things that are similar to what Connecticut and the others -- the other New England states have highlighted in that vision statement. And I think -- well, things that I know this Committee has been really committed to. So, I'm very optimistic.

You know, if you think about how deregulation occurred 20 years ago, there's a lot of discussion and then all of a sudden there was major change that occurred, right, as deregulation swept through. And I feel that we're on the eve of a similar moment where, you know, things that -- issues that we've been debating, problems that have been attention point for a decade are now breaking into, you know, a solution space. And I think we're going to see some major progress here.

I also think that, you know, we have to expect that over the next two decades, we're going to see costs falling and performance improving for many types of emission-free technologies. I mentioned hydrogen which can be stored for long duration events where we need -- where otherwise we will be relying on oil or natural gas to perform long duration storage. We see procurements and investment occurring elsewhere in the country. You know this -- I mean, I think that the real takeaway is when we set targets, it

sends a signal to the marketplace of what we're looking for. When we set the targets far enough out into the future, it gives time for innovators to evolve and deliver on the technologies we need to meet those goals.

We would never have believed five years ago that we would be seeing thousands and thousands of offshore mega -- off shore wind megawatts coming forward and being you know, becoming a major part of our energy supply. And yet, you know, in the draft IRP, we highlighted not only the significant potential for that resource, but how they purchased price for offshore wind has dropped precipitously just over the last four to five years here in the Northeast region.

So, I think that for that reason a zero-emission target set for 20 years from now at a time when we're already on a track to be 91% emission free here in our state, is something that is reasonable to do. It will send the right signal, followed up with the integrated resource plan planning process, which will give us every two years a check in on how we're doing to make that progress. I think that's -- I think that's a really wise way for us to make this transition and be clear about what we're looking for.

SENATOR NEEDLEMAN (33RD): No, I actually agree with that, and I do want to commend you and the Governor for your work with ISO and organizing the other states. I think that's a step in the right direction, but obviously we all know we have a lot of -- we, our generation, is not local. You think it's local and we're making it local by procuring generation. But there's a lot of other generation that's used for the grid, right? It's not -- we have an asset like millstone, but it's a grid asset, not a Connecticut asset. It's Connecticut, in that it provides jobs, and it helps us meet our goals.

But I guess my question was more theoretical about, are we going to be as a state, not generating fossil fuel in 20 years? And I guess it was kind of a leading question. I don't think so. But I'm a little bit in Orlando, wishful thinking, you know, and hope that we are, because I think it's important because that would mean the other states are on the same page. We're trying to reduce fossil fuel generation, as long as we can get reliability and resilience and all the things, we need out of it. You know, when I let it go with that, obviously we're going to talk a lot more and I really always appreciate listening and learning. And thank you for your time today.

CMMR. KATIE DYKES: Thank you.

REP. ARCONTI (109TH): I'm muted. Representative Ackert and Representative Briscoe.

REP. ACKERT (8TH): Thank you, Mr. Chairman and Katie Dykes. Thank you for being here as always. Do I do about a couple of questions? First on the draft that you mentioned that was released, you said last summer, I believe, and you said it's in draft -- is in draft. Is it -- is it finalized or is it something -- I unfortunately, I have three electronic devices working right now and I couldn't look up if we had received that draft?

CMMR. KATIE DYKES: Great. Vicki, do you want to -- I'd like to have Vicki Hackett share the timeline for, I think you're -- I think it's an integrated resource plan. Okay, great.

REP. ACKERT (8TH): Right. The goal to get to the new language in this Bill, which was the 40 -- and I guess a follow-up on that lines nine and ten, that the zero, level 0% from electricity. You had mentioned -- I thought you were -- your comments were regarding that piece, that correct?

VICKI HACKETT: So, I'm sorry. Are we looking for the timeline for the release of the final IRP?

CMMR. KATIE DYKES: No, when -- sorry. So Representative the draft IRP was issued last December and we are currently in the public comment period to receive comments on that draft. The draft included a variety of different -- we modeled a variety of different pathways for meeting the 100%, zero requirement electrical by 2040. And we are expecting to finalize that the IRP in the -- within weeks not months within -- Vicky.

VICKI HACKETT: Yeah. Within the next -- I would say several weeks.

REP. ACKERT (8TH): Excellent. And that's what I was looking for the pathway to get there. It's great to set a goal, but if it does no substantiating background, how do we get there, then that's -- and so a follow up question to that. For us to -- it's because I always don't want to mislead people. It's us purchasing electricity from sources that aren't -- that are zero emission, not generated in Connecticut. Correct? So, I could be buying wind farm energy from Texas, and that counts towards this zero-emission count. Correct?

CMMR. KATIE DYKES: Not from Texas. So, the focus of this is [inaudible] on resources that are delivered to the ISO New England grid.

REP. ACKERT (8TH): Okay.

CMMR. KATIE DYKES: Yeah.

REP. ACKERT (8TH): I didn't mean, I shouldn't -- I should have said something more localized. Sorry about that, but --

CMMR. KATIE DYKES: It's a great question.

REP. ACKERT (8TH): Yeah, but not -- but it's not generated here in Connecticut. So, we can think about jet and energy emissions. I mean, so does ISO now get hydro from Hydro-Quebec, something like that?

CMMR. KATIE DYKES: There is some hydro coming in and that would be you know -- that could be counted toward this goal. But and this is really reflecting that -- we get a lot of benefits from being part of a New England regional grid to access renewable resources and emission free resources located anywhere on that grid. Because there's different parts of the region that have more potential for development of those resources. So, but the focus of this goal would be meeting our energy -- electricity supply here, as we sit within the New England grid from 100% emission free resources.

REP. ACKERT (8TH): Great, thank you for that answer. And I thought that that was, you know, I should have got them more regional, but thank you for that. And then I did have a couple of concerns on section -- and I don't know if I call them concerns, but section three in section four, I did find the -- I know the good -- the Chair, Arconti, brought up the cost recovery that is in the language for -- if I'm a landlord and I need to find out the cost of the last 12 months of somebody is that I get it free as a landlord, but I -- the risk is cost recovery in this language. So, I do want to -- if they didn't pick up on that and then --

CMMR. KATIE DYKES: To get more information for the for the Committee about what those anticipated administrative costs are of providing this type of reporting, I think that may be helpful and happy to work with the Committee on those concerns' considerations.

REP. ACKERT (8TH): Well, thank you. And then I with what has taken place with the pandemic and how landlords you know -- I hope people don't think that



landlords are these, you know, very wealthy individuals that, you know, congest, you know -- because they've been matter of fact, over the last several months, obviously they reached out to me screaming at me saying, "I can no longer continue owning this cause the tenants are -- don't have to pay me." And it says in this language that if the -- if the landlord does not provide a -- the information for whatever reason, they can't get it, that the renter can forego a whole month's rent. So that has a little concern.

Again, had another concern for me on that. So just -- so obviously, you know, it's funny because I work in a field that a lot of times, we look for energy usage in a facility to help the -- you know, the new tenant coming in. We are never allowed that information. We're never allowed that because it's somebody else's using. That's another thing about, you know, as right now I have a -- you know, when I think of homes, I have a large home for me, it's just me. And so, my energy usage are low, but if I had a family of six in here, when we think about the energy usage, you know or somebody working at home as we are now using more energy that -- I know it's a goal that we want to let people know, provide them information about energy usage. But I don't think it's going to be that clear as we want it to be.

So, I'm gonna listen to the dialogue on this. And I did see that in section four under the energy home energy label requirement or something live similar to that requirement that we're gonna -- that we're gonna ask that a seller of the home could just say, you know, I'm going to give you \$1,000 dollars and I'm not going to give you any information. That's part of this legislation also. So, for -- I don't know if you have any comments about those two items of the give-back component of, if you just don't feel like providing information, so here's a free month's rent or sellable homes can just give \$1,000 dollars.

CMMR. KATIE DYKES: Well, we're happy to work with you on -- with the Committee on some of those questions with respect to the enforcement provisions that are true or important if you will. Provisions that are triggered in here, they're intended to make sure that, you know, these -- the information is provided, but also to provide some flexibility as well. Obviously, some information is better than none. Is our -- is our view with respect to providing the, you know, we recognize occupancy you know, whether you know, during the pandemic we saw more electricity usage at home as supposed to work in home.

There are a lot of factors that can go into where the energy usage is on a 12-month basis, but currently people have no information that's provided to them to understand what the energy usage is. The home energy label that you can use as an alternative also better adjusts and provides information that's more focused on the characteristics of the home, the attributes -- the efficiency attributes and less on the occupancy piece. So that that alternative, we hope will give more meaningful information for folks as well.

And but ultimately, you know, we think that it's very important -- you know, we see this Bill helping purchasers and renters but also especially helping real estate investors because we know that high energy Bills are the greatest contributor to homelessness in our state. And homelessness means evictions. Homelessness means that there's a real estate investor out there that's not getting paid their rent because there's someone, you know, individual occupying their home who can't afford the energy usage associated with that property. So, we think that this is really, really important. It also gives landlords and real estate investors, you know, more ability to market energy efficiency investments that they've made in their property.

Otherwise, those things become invisible as opposed to, you know, compared to like the granite countertops or what have you. But so, and we have a whole host of different incentives that are available and marketed directly to landlords, directly to real estate investors through the energy efficiency program. So, we want to be a partner with property owners so that they can get access to those programs that will, again, help ensure that they have more predictable income streams coming from renting out properties. So, in any case, that's, that's really the driver of this Bill. We think it's a, win-win all there all the way around, but we'd be delighted to work with the Committee on, you know, any of these additional considerations on enforcement or administrative costs, and so on.

REP. ACKERT (8TH): Thank you Commissioner always appreciate your answers and your input. I just, for the note for the -- for the drafters of this, it says on lines 176 it takes effect in -- effective October 1st, 2021 in section four, but on line 219, it says starting July of prior to the effective date. So, we might want to just, you know, maybe some JFS language on that.

CMMR. KATIE DYKES: Thank you.

REP. ACKERT (8TH): Thank you, Mr. Chair, as always Commissioner and Ms. Hackett, thank you so much for always helping us out.

REP. ARCONTI (109TH): Thanks. Representative Gresko then Representative Cheeseman.

REP. GRESKO: Good morning, and thank you. And I'll make it quick. In Senate Bill 882, I've read some of the other testimony from individuals, and one of the points they made was the potential of including hydro-power as a -- one of the energy sources, and your opinion on that?

CMMR. KATIE DYKES: So Representative, I know other states, particularly Massachusetts have been very focused on hydro-power as a -- as a base load emission free resource to meet their zero emission goals. Here in Connecticut, I think as the Committee as we're aware. We are, you know sourcing a significant portion of our zero emissions supply from a different base load emission free resource, namely the Millstone Nuclear Facility. So, our IRP modeling, you know, demonstrates that you know, those resources provide different types of benefits into -- but let me turn to our Deputy Commissioner with respect to you any additional comments on small hydropower.

VICKI HACKETT: Yeah. So just quickly you know, we have gotten that feedback as well. We've had some outreach on this and we're happy you know, to set up some conversations regarding small hydro in Connecticut. I know that there are some concerns about compliance costs with you know, some of the things that are required for hydro in Connecticut to protect our natural resources. So, I think that's another area similar to our solar citing process that we're getting ready to roll out that, you know, we could you know, discuss across the agency with my Deputy Commissioners for -- from environmental quality and environmental conservation as well. So --

REP. GRESKO (121ST): It's funny, you should mention that because in sections -- what ten of the Bill that you just referenced, there is the solar permitting process for farmland. And having read the GC-3, to my reading indicates that a direction away from forests core forests and farmland, it was the way that it was suggested to go, and this seems to be going in the other direction. Am I wrong?

VICKI HACKETT: You know, I think that -- again, you know, this is something that we've committed to exploring, you know, as far as solar citing is concerned, we've committed to exploring that.

That's been one of the outcomes of our IRP is to really bring all stakeholders together and really, you know, look at all of the different concerns with respect to solar citing. And so, you know, in this case certainly the department of agriculture would, I'm sure, want to have a role there as well. So yeah, I think there's, you know, there's more conversation that should be had around that.

REP. GRESKO (121ST): The -- in the interest of time and everyone else. So, thank you, Mr. Chair.

REP. ARCONTI (109TH): Thank you, Joe.  
Representative Cheeseman, Representative Meskers.  
You on mute Allie.

REP. CHEESEMAN (37TH): On mute. Yeah. Words to live by. Thank you. Thank you, Mr. chair. Thank you, Commissioner. Thank you for being here, Deputy Commissioner. I'll talk quickly. So, I get my questions in. Energy storage is obviously going to be a big part of reaching this 0% goal. Do we have a timing on an RFP for those energy storage projects?

CMMR. KATIE DYKES: We do not, but I think we, you know, looked at our -- in our integrated resource plan we highlighted the importance of energy -- sorry energy storage, demand response and other types of emission free resources that can help as well as transmission integrate our renewable resources. So, our -- we're excited about the Committee's enthusiasm for energy storage, procurement and, you know, we would look to, I think, our IRP recognizes an early emphasis on investment in storage. Again, recognizing the need to scale up more of those resources that can integrate the renewables that we are already making such progress to put onto the grid.

REP. CHEESEMAN (37TH): So, there is no set date for the issuance of an RFP?

CMMR. KATIE DYKES: There is no set date for the issuance of an RFP. That's correct, but it -- with the enactment of this legislation we would work to identify a schedule for such procurement. We put a schedule for -- we propose a schedule for procurements associated with other types of renewables and offshore wind as required in the IRP and to the extent that this Bill is inactive, we would look to include that as well.

REP. CHEESEMAN (37TH): Okay. And do we have a timeline? So ideally, we'd like to be able to set a date for an RFP by end of this year. I mean, I'm just trying to get some sort of ballpark idea.

CMMR. KATIE DYKES: Certainly, we'd be glad to work with the Committee if there's a desire to put in a set timeline for procurement, I think it's important to have predictability and accountability to the Committee on when such extra authority would be exercised. So, we'd be happy to work with you on it.

REP. CHEESEMAN (37TH): Yeah. Okay, great. I'm looking at this one's nine and ten of 0% from electricity. Does this factor in the desire of the state to move everything to the grid? i.e. electric vehicles, heat pumps, everything like -- so this takes into account increased electric demand?

CMMR. KATIE DYKES: Well, yeah, so our -- in our draft integrated resource plan we included a specific forecasts of increased demand for electricity or specific assumptions of increased demand in electricity for heating and for transportation when we modeled those pathways to meet that 100%, zero emission goal. So, we modeled every pathway, both based on kind of current demand and for a future case where we see increased transportation and heating electrification. So that was included in there.

REP. CHEESEMAN (37TH): Okay. What's the current level of demand response in place in the state? You

talk about that as being a, you know, a critical factor in reaching that zero goal. I mean, where are we currently? Do we know what the utilities have contracted with their, you know, either large commercial users? And when we look at the domestic front, would there be specific financial reward/incentives to those consumers for installing residential demand response?

CMMR. KATIE DYKES: So, we have a number of programs already in our conservation load management program, on demand response that could be scaled up through this -- through this legislation. Let me turn to our Bureau Chief, Mike Li, who can provide the answer specifically to your questions on quantities.

MICHAEL LI: Yeah. Thank you, Representative. So, for 2020, we acquired 50 megawatts of demand response from CNI customers and 13 megawatts of demand response from residential customers. And for 2021, we expect that number to grow, and we anticipate spending about \$2.8 million dollars for residential incentives and about \$4.3 million dollars for CNI incentives and Bill credits.

REP. CHEESEMAN (37TH): And that cost is then reconciled through a rate payer Bills?

MICHAEL LI: The funding for the incentives and the program for demand response comes through the conservation and load management plan, which is largely funded through customers.

REP. CHEESEMAN (37TH): Okay. And quickly so I know 40% of our, you know, reduction goals can be achieved through energy efficiency. And I know one of the goals was to conduct energy audits of all state buildings. Do we know where we are with that?

CMMR. KATIE DYKES: So, we have through executive order one and bond funds that were advanced pre-COVID. I'm blanking on the date. We that authorizes significant investment in audits of all

state facilities so that we can identify the best priorities for energy efficiency investments in state buildings to advance our lead by example program. We'd be happy to -- I don't have those precise -- the precise information to answer your question with me today, but we'd be happy to follow up with you after today's meeting, as we've been holding regular meetings of all of the sustainability coordinators across each agency. And we recently presented on the results of those audits. And I just -- it escapes me the precise answer. So, we're happy to get that to you afterwards.

REP. CHEESEMAN (37TH): That would be great. And just the -- with regard to the energy use, the requirements to supply the last 12 months that would apply only to residential buildings and not to commercial buildings, correct?

CMMR. KATIE DYKES: Yes.

REP. CHEESEMAN (37TH): Okay. Thank you. Thank you for your answers. Thank you, Mr. Chair.

REP. ARCONTI (109TH): Representative. Meskers.

REP. MESKERS (150TH): Okay. Thank you. Thank you, Commissioner Dykes. Thank you to the Energy and Technology Committee. A question and an observation. When we talk about load management, when we look at the system as a whole, what I've been able to gather from all of our conversations, we're trying to get two things accomplished -- or in the load management we're at conservation, and we're looking at storage. Is two of the principal ways of trying to work through the load management issue. It would be helpful if we could get feedback through you on when that gets us to the point of retirement on any of those swing assets, right. I always look at that and then refer to it in terms of storage and the swing asset. I think it's important to me that we figure out what the target is, because right now,



what I'm hearing is that the load management -- the load management may have an issue with us in terms of that it's coming through the distribution charge back to our constituents.

And I think why we want to do both load management and storage is ultimately we can reduce peak demand, reduce stranded costs. And this takes me to the principal concern I have with our entire management plan is the overall distribution costs. So that I want us to get -- to have a target acknowledged in trying to reduce our distributed cost of energy versus the other states. I think that's important while we manage our carbon goals. I'm not opposed, and I'm supportive our carbon goals. I'm concerned that we haven't figured a way to do it smarter and faster and cheaper yet in terms of the distributed energy cost. So, I'd like to see that. So, I'd like more information going forward on what the targets Mr. Li should be in terms of when does it really begin to cut into the stranded costs so we can retire a couple of plans that we are pay -- playing as swing factors that are in our distributed energy cost? Right. I mean, we have to fire them up, fire them down, et cetera. So, I'd like to know if we can -- we can make that a little more efficient and reduce our costs.

VICKI HACKETT: Happy to jump in there.

REP. MESKERS (150TH): I want a comment on that.

VICKI HACKETT: Yeah. I'm happy to jump in there. So yes, and that's one of the really great things about demand response and energy efficiency. Energy efficiency reduces our load and reduces the need to procure new resources. And we've avoided the need to procure new resources with our plans over the years, right? With our conservation and load management plan over the years. And I think Mike Li has the number of avoided megawatts that he can provide.

But also, you know, we would only be procuring energy efficiency and demand response that's cost effective, that's required in the statute. And what energy efficiency, and demand response to is it's cost effective for all rate payers. It's cost effective for the participants, but it's also reduces the cost for all rate payers to you know to achieve our zero carbon goals, but also across, you know across the grid.

And demand response in particular doesn't necessarily risk realize. So, I just want to clarify one thing. It doesn't necessarily rely on storage. So, you can use storage for demand response, but you don't have to. You can also, you know, do demand response with existing technologies or small changes to existing technologies such as Wi-Fi thermostats, for example, or, you know, heat pump, hot water heaters. There's significant potential for demand response to reduce the peak balance intermittent resources as we bring them online. Right. And also benefit, especially our higher energy users such as manufacturers, right? Who can -- who, you know, these programs work with our commercial industrial customers to dial in ways given their sort of operations and production that they can be responsive to system peaks and save significant amounts? That's okay. And save significantly on their energy Bills by participating in this and it's -- and it's an incentive for them, but it also helps everybody. It helps all repairs to reduce the costs, you know, that would be associated with building to those peaks. Is that helpful?

REP. MESKERS (150TH): It is. I just -- as an observation, and then I move on is that obviously he concern is distributed cost of energy in the state is high. So, I'm hoping that these efforts, at some point we are reflected in the distributed Bill and that's imperative, I think. And as a final comment on that, I find the Bill continuing to be unreadable. And when I get constituents asking me

about the associated charges, it's -- I find it complicated. So, we'll have to -- that's something for further conversation. I wanted to move on to an observation for the Commissioner on the distributing companies wanting to get into the solar market. I think I wholly support. I'm an agnostic on allowing them into the market, but I share your concerns. I don't want the rate payers funding assets that are going to shareholders to generate solar versus third-party solar generators who are selling us the product and letting their shareholders take the development risk.

So, I don't wanna -- I don't want us to put our distribution companies in the back end of production unless they're going to do it as a separate entity, and they want their shareholders to fund it. I don't think we should be funding it. I think we've already made that decision that the distribution companies, we were going to pay them to maintain the network. I'm not interested or at least I can see the rationale of why we would want to let them fund up -- why they -- we would fund them in the development of assets for electric generation, since we're not doing that for anyone else -- it would. So, I would just be concerned there. And I would highlight that for you.

And apart from that, it's a concern on energy distribution charge. You heard me it says, I think that covers most of the concerns I had. So, thank you very much.

REP. ARCONTI (109TH): Thanks, Representative.  
Representative Demicco then Representative Arora.

REP. DEMICCO (21ST): Thank you, Mr. Chair. thank you, Commissioner, to you and your team for being here as always today and offering good testimony. So, I just wanted to go back to the Bill 882 specifically section three which I think that Chairman Arconti and Representative Ackert have already asked a couple of questions about this, but

I just wanted to just briefly ask a question or two. So, I know that the home energy label is a laudable goal. I think it's a good idea. In theory, I'm just wondering how this is actually gonna work in practice for both the landlord and the tenant.

So as was mentioned earlier in line 138, line 139, they talk about the records of energy consumption are gonna be made available free of charge. And then a couple of lines later, it talks about recovering, you know recover the information technology costs. So, as a practical matter, isn't this -- isn't this just a -- an opportunity for the electric district -- or any utility to basically raise their rates, even if it's only incrementally in order to justify, or in order to recover their costs since this Bill allows them to do that? Would not be the practical result?

VICKI HACKETT: I think, you know, as the Commissioner said earlier, we're happy to talk more about, you know, what the scope of those administrative costs would be and how to limit those administrative costs. I think what we're looking at is something, a benefit that, you know, would far outweigh any limited administrative costs that might be associated with it with providing information that the utilities already have. They have this information; they would just have to administratively provide it to landlords or property owners rather upon request.

So, but the benefit of this Bill is that we're no longer going to be asking people to commit to a home without knowing what it's going to cost and without, you know, --and what we run into is people who end up in a home and with having no idea what their energy costs are going to be. And if, for example, that home has electric heat now suddenly, you know, without any prior knowledge, they have to come up with a \$500 or more payment in the winter for their energy costs. And if they can't afford that, it's unclear what they're supposed to do.

And that's why this leads to homelessness for people who don't have enough money to, you know, find another security deposit, you know, move to a new place. They are now caught between a rock and a hard place with choosing between paying the rent, paying for food, and paying for their energy Bills. So just having some level of transparency upfront empowers consumers and puts them in a -- in a position of making an edgy or more educated choice than the choices that they're making right now, which is with no information whatsoever.

REP. DEMICCO (21ST): And I appreciate that Deputy Commissioner, and certainly transparency is something that none of us can argue with, but it was suggested in some testimony that was -- that was submitted by the realtors. As a matter of fact, I'm looking at their testimony and they're suggesting that this effort towards transparency might actually have -- ended up with -- you'd end up with a false expectation. In other words, the energy costs of one person, one family might be vastly different from the energy costs of another family, depending upon how much they use and what type of devices they use and so forth. So, transparency is great, but it, you know, it gives you an idea, but it doesn't really tell you what the -- what the ultimate cost is going to be. Would that not be correct?

CMMR. KATIE DYKES: That's true. I think that's true, Representative, but the key is, is this -- is it better for everyone to have no information? I think that's what we're weighing against. And, you know, certainly there are -- it -- we recognize that this information is not a perfect predictor of energy costs and it needs to be communicated in that way. And you know, certainly there are -- I hope it opens up a conversation for you know, homeowners and renters to, you know, be talking with their landlord or thinking about how they can access more of the programs through Energize CT to make further improvements on their energy use if they're made it

-- motivated to do so. But currently we're all flying blind, and no one has any information to understand if, if they value having affordable energy costs, they have literally no information to inform if they're weighing one property versus another what those energy costs are going to be.

REP. DEMICCO (21ST): Fair enough. Okay. I appreciate that again, you know. Okay. We'll -- to be continued. So, one of question that I have has to do with the section, it's lines 149 through 153, talking about not -- about the utility not disclosing personally identifiable information. But as a practical matter, if a landlord asks for the energy information on apartment one, two, three, four clearly the personally identifiable is going to be revealed because he or she knows who is renting apartment number one, two, three, four, or am I miss-interpreting this or misunderstanding this?

CMMR. KATIE DYKES: Vicki, do you want to take it?

VICKI HACKETT: Yeah, I -- you know, there are five states and six cities that have an energy disclosure mandate. You know, we're happy to talk more about how to overcome privacy concerns, how to overcome, you know, concerns about administrative costs, but there are states that are already doing this. We think that the transparency -- we know that renters and home buyers are prioritizing questions around this. When they're looking at homes, we're getting that feedback from people. And, you know, this provides a way for landlords to be able to answer those questions efficiently by just calling the utilities and getting the information from them. Right. And to be able to answer those questions that are coming from people looking for new homes. So, I think that, you know, disclosing energy use on an address, I'm not sure exactly what the privacy concern would be with that. It wouldn't have a name associated with it or account number or anything like that. So, but we're happy to talk more about

that. But there are other states already doing this.

REP. DEMICCO (21ST): I appreciate that. And as far as you know, someone who owns -- someone who owns several properties, is he, or she going to be able to get a breakdown as to the amount of energy that's used in a particular apartment or in a particular -- in a particular unit as opposed to an aggregate number?

VICKI HACKETT: If that unit is separately metered, then yes. And this only applies if the -- if the energy costs are paid for by the tenant, which would generally be if it's separately metered.

REP. DEMICCO (21ST): Okay. But if it's not separately metered, and the landlord has, you know, multiple dwellings, now, how is that landlord going to be able to break down the cost for the individual apartment?

VICKI HACKETT: It's not separately -- it's only -- the landlord only has to comply if it's separately metered is my understanding. So --

REP. DEMICCO (21ST): Oh, is that right?

VICKI HACKETT: That's I believe that's right.

REP. DEMICCO (21ST): Okay. I will have to check that. Alright. I appreciate it.

VICKI HACKETT: We can talk more about that, but I believe, you know if the landlord wraps -- well, maybe I'll turn it over to Mike Li, but I think if the landlord wraps it into the rental costs, then they don't have to provide the Bill disclosure from the utilities. Is that right, Mike?

MICHAEL LI: That's correct. And yeah. So, if the landlord is paying for the energy Bills, then they

do not have to comply with this because the energy Bill is wrapped up into the monthly rental costs.

REP. DEMICCO (21ST): Correct. No -- okay. I saw that in the language. I appreciate that. So, my final question and sorry to belabor this, but I, you know, I've been asked questions from constituents who are landlords, who are about this. And I guess my final question has to do with the civil penalty and the municipality, you know, of being the one to enforce this. Is this how it's done in other states? Is this -- is this really the right way to do this?

VICKI HACKETT: We're happy to provide a review of enforcement mechanisms for other states if that would be helpful. And again, we're just -- we're happy to discuss those details with the Committee.

REP. DEMICCO (21ST): Okay. Thank you. I just wanted to raise those concerns because they were raised by some of my constituents. Alright. Thank you very much. Appreciate both of you, all of you, and thanks Mr. Chair

REP. ARCONTI (109TH): Representative Arora then Senator Haskell.

REP. ARORA (151ST): Thank you, Mr. Chair. And thank you, Commissioner Dykes and Deputy Commissioner Hackett for your testimony and for being here. Truly appreciate it. And I also really appreciate your leadership on -- and focus on reducing our carbon print. I think that's one of the most important issues, perhaps our society faces over the next few decades. And I think while there may be some differences as to how we go there, the goal is one we all share 100%. Now I wanted to ask you a question about the -- about Bills five, six and item number five, six, seven primarily SB 952, but also 51 and 6253, all three are impact or solar programs.



You know, one of the things I wanted to get clarification is that when you did say that 65% of our generation right now, including Millstone is -- has no carbon, but 60% or 20 million megawatt hours out of the 20.5 is really Millstone. So, you know, I do, you know, sometimes it's the optics really matter because it's a cliff, you know, we all know that's not for the long-term. Maybe in five years, ten years, 15 years, it's all gone maybe 20 years. And I don't -- we don't know how long.

So really, you know, I think it's -- is it not important? Would you first confirm that that really, if you exclude Millstone, the zero-carbon renewable energy being generated is about 500,000 megawatt hours, or basically 1.5% of our overall production of energy in Connecticut. You know, and I just want to make sure so that we keep focused, that there's a long way to go here.

CMMR. KATIE DYKES: I -- So Thank you, Representative, and I -- it's great to hear. I do know that we all, I think share that goal of ensuring continued progress to address the climate crisis and deploy more emission free resources. So, the Millstone currently does make up a pretty outsized share of the emission free resources that the -- our -- the state has contracted for.

And that there's a number of reasons for that. I mean we were hopeful that the ISO New England market would evolve or that other states would be willing to take on some of the costs of -- needed to retain that emission free resource, given that it is so regionally significant.

We would have seen regional grid emissions increased by 25%, not just in Connecticut, but across the region, if that -- if Millstone had prematurely retired. But the fact of the matter is, at the moment that decision had to be made. No other state was stepping up and the ISO New England was not coming forward with a plan. So that's one of the

reasons that the Millstone facility plays such a significant -- is supplying such a significant portion of that emission free portfolio within the state.

Our integrated -- it is imperative that we have targets that are clear that are -- we can count on, and that are far enough into the future, that we can plan effectively for reasonable, for progress over, you know, a long-time span. That's the best way for us to achieve our decarbonization goals in a way that's affordable for repairs and reliable for the grid.

And so, the contract that we currently have with the Millstone facility will conclude in 2029 and our integrated resource plan, I'll commend to you to take -- to see some of the pathway's analysis that we did there, because it's a key question for Connecticut, but for the entire region about how you know, what do you do after 2029?

We're hopeful that, you know, our analysis shows that there's a lot of benefits in terms of lower costs, less impact on other -- on build out of natural, or sorry, on you know, there's more retirements of fossil fuels if base load resources like nuclear and hydro are continued to operate and provide a significant portion of our emission free resources regionally through 2020 -- through 2040. But you know, we have to start planning.

We have to be able to plan to think through if that contract ends and we don't continue seeing the Millstone facility operating in New England then we need to be ready to ramp up significantly, renewable procurements and procurements of storage, demand, response. You know, the things that we'll fill in for those hours when the sun isn't shining, when the wind isn't blowing. We have a big, big procurement task on our hands to be able to replace that quantity of megawatt hours.

So that's why it's really important for us to have goals that are durable and set in statute. We currently, other than the RPS, which only focuses on the renewable portion, we don't have any targets for the electric sector specifically that are in statute. We have one broad economy-wide target under the global warming solutions act, but not a specific target to aim for in terms of you know, meeting our energy needs reliably with emission free resources.

So those are some of the reasons why we think it's important to have this goal setting. It also ensures that we have these kinds of conversations, right? About how we're going to meet those goals. That's always been a key part of ensuring that we have affordable, reliable decarbonization strategies that meet the needs of all of our stakeholders is that -- and citizens in this state is the robust discussions that occur with the general assembly about how to get there.

REP. ARORA (151ST): Absolutely. No, I really thank you for that. You know, I've spent a lot of time on the IRP. You guys put a -- you know, your agency put out, you know, and perhaps, you know, more hours than I should have, but I think they will be -- they will pay off eventually, I know. You know, one of the questions, which, you know, when I read that plan and study it, and I would like to have your comment on it, is that there -- the way we are going to get this done is, you know, planning is great, but I think more importantly, by making sure that our environment for business development for renewables is attractive, both for capital as well as from a regulatory standpoint.

You know, and, you know, when we built out in our country, the data access, it happened in you know, high-speed access. It happened actually for most of the country in a year and a half. You know, if you remember 2002, I wasn't that DOL -- that modem thing in 2000, sorry, '99 and '01 everybody I knew was on

high speed because it was very lucrative and it was not only lucrative. It was passable for -- in an unregulated environment for businesses to put forward these services and goods.

And our system really works when we attract and energize our business community, our entrepreneurship to do it and not control it. And, you know, perhaps, you know, I worry, you know, if we -- if -- we may be controlling them more, and in my conversations with the industry, what I'm -- what I'm being told is give us an unconstrained program on solar. Don't tell us 10 megawatts, two megawatts, four megawatts. We should be talking about thousands of megawatts and the cost of capital, as I'm told right now, by some very senior people in the industry is basically very low for solar.

And they're saying, "Well, if you allow us to develop hundreds of megawatts, 2,500 tenure clip -- 25, a clip, we have access at really low rates, you know, ROE of 7% ROE, maybe a little higher, because there's a lot of debt in it. And on top of that, you know, it is the regulatory environment which they are pointing out in other states is really giving them the opportunity to think and implement ten, 25 and even 100 megawatt plants.

So, one of the things I want to ask you, and in your opinion, or your guidance and your advice is should we be looking at the program? And in the Committee, chair Arconti has been very supportive, and my ranking had been very supportive of these discussions is, should we -- should we be talking about an unconstrained program at perhaps the standard offer?

Our standard offer is very high relative to other states. It's 8.5 Cents. In many states -- and I'm told that maybe not 8.5 if you include the ISO rec, which is another penny and a half at 10 cents, or \$100 dollars a megawatt, you don't need any subsidy.

You don't need a program, you just need connectivity, right?

So, would you really comment on that. What about an unconstrained program unsubsidized 99% of the current value for 20 years? Right? But come on in you have capital, you've got 5 Billion, we'll take it all, but we want to give, energized, give a tool to these developers to compete and to be able to build as in my business, we call sites, right? Not this, you know, and I love the 0.1 megawatts too, or the, you know, 10 kilowatts too, but, you know, as I -- my initial point, as I pointed out that after what we've done, we're still at 2%, we need to get to 20. So, would you really support some kind of a program, an unconstrained program left subsidy or un-subsidized, but which, which focuses on the regulatory element of helping these developers get access?

CMMR. KATIE DYKES: Representative Arora, I think, I completely agree with your comments. And I think that this is why, you know, it's -- we are spending so much time and putting so much emphasis on reforming the ISO New England market, because that is the unconstrained regional, scalable investment vehicle for meeting our energy supply needs. And, you know, we perceive that the way that that market was designed 20 years ago, prior -- before there was so much emphasis on de-carbonization at the state level it was built around the investment needs of fossil fuel resources. Okay? Which have both upfront fixed costs for building the plant and then marginal costs associated with fuel?

So, we have been working assiduously to remove barriers to resources like solar, like renewables, being able to compete in that market. We believe that reforms, that market that ensure that more revenue is flowing and more earnings opportunities flowing through ancillary services and the energy markets is going to ensure that those technologies like solar can better compete in that market.

Ratepayers in New England are spending \$2 Billion a year on a capacity market that is constructed, you know, with certain protections around it again, for the benefit of fossil fuel resources. It's forcing legislators, it's forcing state policy makers to have to spend a lot of time developing an alphabet soup of different types of carve-out and special programs to ensure that renewables can play. And if we really want to make sure that this happens at scale we have to, you know our eyes on the prize of making sure that the market that we have to pay for anyway, the ISO New England market is working for us to provide local, you know, a pathway for investment to achieve not just reliability, but our decarbonization goals at least costs.

The other thing I would tell you is that we have to work very quickly and very intensively on is ensuring that the siting and permitting for renewable resources and other resource things like storage area -- is clear and predictable and transparent. I just came from a presentation or DEEP shared our progress on our 20 by 20 initiative of increasing the predictability efficiency and transparency of the 125 different permitting processes that we have responsibilities for the citing process that we want to kick off with respect to solar and other renewables is another important piece of the puzzle.

We have to do better to deconflict our challenges around, you know, availability of sites and protecting our natural resources so that those developers can play and build out low-cost projects and compete in our competitive markets. I think, you know, those are our high priorities for us in the department. And I think aligned to some of the questions or comments that you've just made.

REP. ARORA (151ST): Well, thank you so much. And I have one final question Chair. My Chair Arconti hopefully I can indulge me here, and which is really

to follow up on your last comment about sighting and connect it. And I'll add to it, the regulatory aspect of connectivity. Because in my discussions with the industry and many players, the question here is that, "Listen, you know, we are a state, which was -- which has had developed over hundreds of years here." So there -- it's not as if there is lean, which is available, which is doing nothing. Right?

Most of the land, which is there is either reasonable flat land is farmland. And it's not really lucrative farming here in Connecticut, as we know. It is -- it is -- it is tough farming economically. And I think, would you really say that some of the restrictions on using farmland considering the gravity of the climate prices should be -- should be removed and relaxed as long as we don't get to a certain amount or a certain number in accessing our clean energy needs, because, you know, we have to -- we -- I'm a big farm guy.

You know, I -- my dream growing up was to have my own farm and do what, you know, the world and be really, you know, live by yourself, cut yourself from the world. But I, you know, now I'm in a big town here. But, you know, my question really is, would you support something where at least we can relax farmland you know; the farm and exemption allow for farmland to be used for some of these solar panel usages you know, at least to the extent that we can develop and further develop -- further the solar industry.

CMMR. KATIE DYKES: So Representative, I've got another report for you sadly, but I think the Governor's council on climate change some of the working group reports that have come out of that process have been really helpful and informative to me. And I think maybe useful to take a look at specifically, this is -- for the first time in our climate planning, we've included a look at the carbon mitigation benefits of natural and working

lands. We are an incredibly dense state. We have a lot of people living here. We're not, you know the Midwest or Texas, so we don't have lots of, you know, open areas. We are also a heavily forested state and we have an agricultural economy on that's contributing importantly to many aspects of our economy. And those natural working lands are sequestering carbon in the soils.

We need to continue to preserve that sink of carbon sequestration through those natural working lands. So, so I would not prioritize taking away protections or developing out solar in a way that compromises our national working lands. I do believe that we have -- we have more low hanging fruit that we can pick in terms of directing solar development to disturb plans. We have worked very hard including with the legislature on speeding up the cleanup of brownfields and other types of disturbed sites through our cleanup -- a streamlining or cleanup programs for contaminated sites, for example.

These are the types of things that we need to do to try to maximize the build out of solar on -- in those flat areas that are otherwise not being used for again, supporting an important part of economy or sequestering carbon in natural sinks. But it's -- this is a big challenge, and this is another reason why it's so important for us to invest in energy efficiency because as we progressively decarbonize, the more we can reduce down on, you know in ways on the, our energy usage, right, the less renewable build out.

REP. ARORA (151ST): I mean, we think of renewable build-out as like a really good thing, and it is but the more that we are doing, the more we are having these -- we'll have these conflicts in terms of other natural resource benefits. So those renewable projects are precious projects. We want to ensure that we're not overbuilding where we haven't sufficiently invested in cost-effective energy



efficiency. To say I mean -- so we're thinking about all these things, these stuff that obviously we're very passionate about.

I'm happy to follow up with you offline.

CMMR. KATIE DYKES: No, I would take -- I would really love that opportunity. I do want to point out that typically sequestration from natural lands to putting up -- replacing a fossil fuel is a 1:15, or 1:20 equation. You know, we are on the -- we can read our numbers there, you know, and that's really, I really appreciate the fact that you have such a strong grasp on these issues.

You know, so, you know, I know there are those who are -- some who will say no farmland at all costs, but, you know, I normally say if it's a 1: 20, you can save one unit of carbon by actually natural sequestration, and you will save 20 units, you know, 20 times. And, you know, depending upon the equity we are talking about by basically putting a solar plant there, and if we use 0.5 -- 0.0, 0.1% or 0.1% of all our farmland, you know, it just -- it's going to be -- it's okay.

So, I wanna - I want us to be, not be purist in some sense, but see the pragmatic approach, because without farmland, just, as you said, if we take these disturbed lands, the cost of solar becomes untenable. It won't be market-based. Then it's going to be UN you know, our legislative bodies supporting it. Whereas if we let them use, you know, flat farmland, then it's going to be market based and we can do scale projects.

So, it's a decision to be made if we really, you know -- there are always tradeoffs, you know, that I know that we all know that. I thank you for your time, and I will take you up on the opportunity to have a separate conversation offline, but thank you, Mr. Chair, and thank you to Commissioner and to

yourself and Deputy Commissioner Hackett for being here.

REP. ARCONTI (109TH): Senator Haskell.

SENATOR HASKELL (26TH): Thanks so much, Mr. Chair, and great to see you Commissioner and Deputy Commissioner. I am so grateful for the time that you've spent with our Committee this morning, and I won't extend it very much. I just wanted to zero in on SB 882. I'm personally -- I can't imagine anything more important than transparency as somebody when someone is deciding where to live, and I think they ought to be able to evaluate energy costs.

I took a look through the negative, I should say, through the testimony and opposition that came in. And one thing that struck me is sort of unconvincing is this notion that landlords are wholly not in control of the energy consumption by their tenants. It -- I'm certainly no expert in this, but I think both of you are a -- DEEP has conservation and load management programs to help landlords assist with lowering the consumption by their tenants. Can you provide an -- a just -- a very brief explanation of how those programs work for the Committee's benefit?

VICKI HACKETT: Sure, absolutely. So, first of all, I agree when you -- when you look at the balancing of the equities the landlords are certainly, you know, they have more control over the energy use or certainly the infrastructure that contributes to energies within their buildings. And so, what we have through the conservation and load management plan is we have programs that are available for tenants in single-family homes up through, I believe it's homes with up to four-family homes. Okay.

So, tenants can sign up directly for those programs. And then they -- and then landlords -- when the tenant signs up for those programs, landlords are eligible for the larger measures that homes are

generally eligible for -- they're eligible for those based on the income of the tenants. Okay. So, if the tenant qualifies for our low -- our income-eligible programs, then based on the income of the tenants, the landlord can be qualified for the higher incentive levels that we have for insulation and HVAC and you know, all kinds of really effective measures at the income level of their tenants.

And then for our multi-family homes that are, you know, five, I believe that's five apartments and more, the program works directly with the landlord and with a free assessment to get things started and really dials in the measures that are available from again, installation, HVAC. We can do rebates on appliances to make sure that that home can be as efficient as possible in ways that are very affordable for the landlord. And again, if 66% of the tenants and that multi-family dwelling qualify for the limited income eligibility, then that landlord gets those higher incentives based on that qualification.

So -- but part of the problem is if the landlord does not pay the energy cost, right? If the tenant is the one paying the energy costs, then the landlord may not be really incented to come in to the and participate in the programs that really do offer you know, really effective and cost saving measures at a cost-effective price.

SENATOR HASKELL (26TH): And thank you so much for that answer. And I guess the flip side of that of course, is by imposing transparency. There is an incentive for the landlords to take part in those programs.

VICKI HACKETT: Yes, that's right. And this really is, in my view, it's an energy justice issue. You know, you can't have affordability if you don't first have transparency. So, you know, it's just -- it's so important for people to be able to know what to expect before they move in. And you know, if --

and if they're in a more efficient home, then they won't be having to make decisions about you know -- they won't have to run their heat as high. They won't have to, you know, their energy Bills are going to come down. And then when the landlord discloses a tenant's energy Bills, they're going to be lower.

So, it's good for the landlord as well. And we've talked to landlords and you know, heard from landlords that their tenants are asking questions about energy use, and they have a lot of questions before they move in about energies. And landlords - - you know, I would think that this would ultimately be helpful to them to be able to answer those questions and not end up in the situation that Commissioner Dykes was talking about, where, you know, they're potentially have tenants facing eviction.

The other thing that we're doing in the energy efficiency programs, we just released our 2021 plan update yesterday. And we're going to have landlord round tables to bring landlords in and, you know, talk with them about what's available. And, you know, we were requiring that landlords from the -- that we work with landlords from all different sectors, you know, from large multi-family buildings down to a smaller landlord with, you know, two or three family homes to really hear from them about what works best for them and their tenants and make sure that they're aware of the program offerings that we have.

SENATOR HASKELL (26TH): Wonderful. Well, thank you so much, Deputy Commissioner Hackett for your insight. Thank you both for your time. And I look forward to supporting transparency. So, thank you, Mr. Chair.

REP. ARCONTI (109TH): Representative Piscopo.

REP. PISCOPO (76TH): Thank you, Mr. Chairman, and thank you Commissioner for coming. I appreciate it. My question goes to the lifespan of some of these newer plants that we've come on, that we just brought on to provide 24x7/365 power to the state, big natural gas plant, and we're not in Middletown and they're bidding during the summer months about 3.50 cents kilowatt hour -- nuclear -- our nuclear plant was 4 cents a kilowatt hour till it just went up to 4.90 cents.

And this wind generation coming on in the future is we're looking at 11 cents a kilowatt hour with subsidies, maybe 9 cents. And as Representative Arora mentioned solar, he says, can't compete with that. So, I'm just worried about the cost of procurement. It seems -- it seems tough to do and come in with those competitive prices that we off -- that gas and our nuclear power had offer. Can you just do a quick comment on that? And I started to take too much of this Committee's time. You've been on -- you've been on the seat for a long time.

CMMR. KATIE DYKES: Thanks for your question Representative. So clearly, we have goals including enacting to statute that signal the need for us to reduce our carbon emissions. We think about our mission as achieving affordable, reliable, and clean power. And so, in terms of affordability the figures that you've highlighted different types of technologies have different you know, operating costs, different fixed costs, and so on.

Wind, I would say just to revise, is more like 8 cents. Eight to - eight to nine cents is the range of pricing that we've been seeing in our recent bids. But are -- you know, we have concerns, although natural gas is lower costs in terms of the wholesale electricity markets, we have already, because of the design of the ISO New England markets ended up being very heavily dependent on natural gas resources.

And even just above 50% of our energy supply comes as natural gas in New England has put us in a position whereby in 2017, the ISO issued a report saying that that gas dependence is essentially expose the region to the risk of blackouts or brownouts that would be catastrophic because those plants can't access, natural gas supply needed to run reliably year-round.

And that is one of the reasons in addition to economic development and carbon benefits that the state prevented the Millstone nuclear facility from shutting down because the ISO report told us that the loss of that Millstone facility would put us even more catastrophic independence on natural gas resources. So, the theme here is that reliability requires people diversity. And so that's been a really important part of our planning within the state. It's an insurer that we are not becoming overly dependent on natural gas resources, particularly even though our -- the ISO selects for them in their market as a least cost resource. We have already had to take on more costs at the state level to preserve the reliability of the ISO grid in the face of that outsized dependence on natural gas resources.

And then finally, I would say, you know decarbonization is a cost saver in this -- in this regard. We are already seeing the impacts of the climate crisis on our -- on our communities, on our citizens here in the state with the emissions that are already -- of greenhouse gases already in the atmosphere, or we have to prepare for the inevitable impact of at least 20 inches of sea level rise by 2050, a fivefold increase in the number of days that are above 90 degrees Fahrenheit increase in the frequency of droughts, increase in the frequency of high intense rainfall events, both of which I could point to experiences we had just in the last year.

These things have a profound impact on our economy. We have -- we are second only to Florida in the

percentage of insured property value in our state that's vulnerable to the impacts of sea level rise. In terms of the percentage, not the total quantity of insured value. So, the cost of not acting on climate will dramatically outweigh the costs of making investments in resources that reduce carbon emissions. Is -- it's just absolutely imperative for us to do that. And so, for that reason that's been the driver for us to make these investments in emission free resources. And we find that they're providing benefits in terms of enhancing the fuel diversity of our grid and through the procurements that we have been implementing. And our investments in energy efficiency, we feel very confident that we are investing in developing renewable resources in a way that is most affordable for right here, as in the state. Doing decarbonizing affordably and reliably is our principal objective.

REP. PISCOPO (76TH): Thank you, Commissioner.  
Thank you, Mr. Chairman.

REP. ARCONTI (109TH): Representative Mushinsky.

REP. MUSHINSKY (85TH): Thank you, Mr. Chairman.  
Commissioner, I just wanted to ask you, do we need to withdraw from ISO in order to successfully decarbonize? And if you already covered this, I apologize. I've been on the phone off and on.

CMMR. KATIE DYKES: No, thank you, Representative.  
That's the first question I've gotten on this? No, we don't need to withdraw. I wanna be clear about what withdraw means. Some have questioned whether we should pull out of the ISO meaning like physically disconnect from the regional grid. We get a lot of benefits from participating in this regional grid that we've invested in, that's built up over decades of careful planning. And so, I would not recommend disconnecting physically from the grid.

I've expressed significant concern around whether the ISO New England markets as they've been designed and as they've evolved over the last two months -- two decades are serving the state's public policies, including carbon reduction and to the extent to which they're even achieving the original aims of deregulation in terms of providing lower cost energy in a way that shifts risks to ratepayers -- to shareholders in a way from ratepayers.

But I -- you know, I feel very -- I think that we get a lot of benefit from participating in a regional market. I also firmly believe that you know we should not abandon competitive markets. That original aim of deregulation is still one that is resonant and important today. We need competitive markets, especially to ensure that we can decarbonize affordably.

So, my aim and my goal has been to work with the other New England states that participate in the market. And most of them have carbon policy similar to what we have here in the state of Connecticut, and to push for reforms to the ISO New England and to that market. So, we can finally get the benefits of deregulation of shareholders taking on more of the risk and getting lower cost energy supply that is compatible and achieving our carbon goals here in the state of Connecticut and across New England.

And so, I did mention earlier, we've made, I think a lot of progress over the last few months. All six states sign on to a vision statement that articulates goals for reform of the market's improvement to transmission planning and more accountability and transparency in the governance of ISO New England. We've had technical forums on each of those topics just in the last couple of weeks this winter. And we look forward to next steps for identifying specific reforms that we want to pursue with the ISO New England.



I'm hopeful that as we see some changes at FERC and kind of a new recognition or an increased recognition of the need to work with states and recognize state's public policies, I think that we have a real window to make some serious changes and ensure that we don't have to leave the ISO New England market, but rather we can finally get the ISO New England market to work for us and for the goals of the state.

REP. MUSHINSKY (85TH): Okay. So, to sum up you're recommending we stay with them, but reform how they operate.

CMMR. KATIE DYKES: Correct.

REP. MUSHINSKY (85TH): Okay. Thank you. Thank you, Mr. Chairman.

REP. ARCONTI (109TH): No problem. Alright. I don't see anybody else's hand raised. So, you're off -- you're off the hot seat. I don't know if we set the record today, but there's a lot -- a lot of good discussion. Look forward to talking to everybody soon.

CMMR. KATIE DYKES: Appreciate the opportunity. Thank you so much to the Committee.

REP. ARCONTI (109TH): Up next, we're going to go to PURA Chair Gillette, and I think she's her with Kimberly White, staff attorney, for PURA, and then after. So, Mr. Clerk, after PURA testifies, let's start going back and forth from the Members of the public and the public official list. So, after PURA, please call the first member of the public. So, Chair go ahead, all yours.

MARISSA GILLETT: Good afternoon, and thank you to the Chair, vice chairs, Ranking Members, the Committee, and to your clerk. Who's been especially patient shuttling us all hurting these cats. So, I want to thank you for the opportunity to provide

testimony this afternoon. We filed written testimony, I believe last night for your consideration on seven of the 11 Bills including a number of suggested amendments that we would respectfully come into you if some of the legislation is to move forward but this afternoon, I would like to focus my opening remarks on two Bills in particular. Those two Bills would be house Bill 6526 and Senate Bill 952.

And with me this afternoon, I have Ms. Kimberly White, who is a staff attorney and a subject matter expert to assist me in answering questions on House Bill 6526. So specifically, with respect to that Bill, which is the legislation that addresses electric suppliers, I'm here testifying in strong support of the Bill just for the Committee's reference on a day-to-day basis.

So, specifically with respect to that Bill, which is the legislation that addresses electric suppliers, I'm here testifying in strong support of the Bill. Just for the Committee's reference, on a day-to-day basis, the authority devotes a significant percentage of our limited staff resources to monitoring and enforcing customer protections with respect to the third-party supplier market. We have upwards of a dozen active investigations currently and in just the past two years since I've been here, we've completed adjudications in two other suppliers that have resulted in multimillion dollar fines.

So, what we see before you today that we are respectfully asking for your consideration on is a Bill that is targeted at providing additional customer productions for the residential market. And if you'll indulge me, I just want to touch on a few key provisions of the Bill and elaborate a little bit on what PURA sees as the primary drivers of each of the requested changes.

So, importantly, some of the changes that this Bill would make would be eliminating early termination

fees. Even though early termination fees can be as low as \$50 these days, what we find when customers call our call center is that the mere fact that there is an early termination fee, serves as a deterrent from switching either to a supplier, with a more competitive rate or returning to standard service.

Also, a major provision of this legislation would be to once and for all move folks off of variable rates. As the Committee may recall, several years ago you pass legislation that we think intended to remove the use of variable rates for residential customers and, unfortunately, because of automatic renewal provisions in those contracts, which is something I'll touch on it a little bit more in a second, we still have upwards of 14,500 customers on variable rates today.

So, we think it's important that we clarify that those contracts cannot be used any further. Again, with the automatic renewal provision, which is something, frankly, you'll hear quite a bit of testimony about today, the automatic renewal provisions, which basically allow a supplier to renew a contract, it doesn't have to be at the same rate. So, if a customer entered into a contract at one rate and they don't continue to monitor it, third-party supplier has the opportunity to renew that at the end of the initial term at whatever rate they choose.

And I think one thing that I really want to flag for you all, is that we get monthly data from third-party suppliers and specifically, with our COVID payment plans right now and we surveyed the data that we had from just last month. And of the 3,436 customers on COVID payment arrangements who received service from a supplier, almost 2,300 or 66% of those are paying rates that are greater than standard service and a lot of those rates are upwards of \$0.20 cents per kilowatt hour.

And just for your reference, the standard service rate right now is in the \$0.07 cents to \$0.08 cents per kilowatt hour range. So, there are a couple of other provisions in the Bill which I'm happy to touch on further about assignment of customers. And really as a whole, the Bill, we feel is important to furthering the protection of the residential market because importantly, we just want to see customers further protected.

And I'm happy to answer any questions that you may have about that Bill or others and I'm also here in strong support of the Committee's Bill specifically, setting the storage targets. So, happy to address any questions that you may have, and again I have a subject matter expert here to help me out. So, over to you, Mr. Chair.

REP. ARCONTI (109TH): Sure. Thanks, Commissioner. I do want to walk through some of the Bills, kind of like we did with DEEP earlier. I have some questions on the Supplier Bill something to start there. Just for new Members of the Committee, too, can we clarify which part of our constituents -- utility bills, this, the suppliers live in?

MARISSA GILLETT: Absolutely, and I think that that's a very important point here. So, currently, especially if you're an Eversource customer, what your constituents would be used to seeing is a Bill that's divided between the supply and the delivery side. The third-party supplier market is just addressing the supply side. So, there is no form of competition for the distribution side of your Bill. So, what we're talking about here is the difference between a standard service rate, which is a pass-through rate that the utilities can provide to your customer who do not select a supplier, versus a third-party supplier rate.

And we're only addressing that component of the Bill.

REP. ARCONTI (109TH): Okay. Thanks. I think that's important implication. And you touch on the auto renew aspect and what we're looking to change in this Bill. So, as you laid out -- people are so busy these days. They may not be as zeroed in when they're first term or second term is expiring and is coming up for an auto renew. So, what happens, when after first term, someone who's on a third-party supplier gets auto renewed and based on the data you shared, there's a decent chance that supply side is going to be going up and I would doubt many people are going to be expecting that to happen.

And then, all of a sudden, they can't afford their monthly utility ability anymore. Where does that go? Does that go in on collectibles like you would, if you could have for utility bill, if you are with an EVC?

MARISSA GILLETT: It does and I think that this is a very crucial point for folks to understand, that what we're balancing here is not just an individual's right to choose their supplier, but the effects of that choice on ratepayers as a whole. So, if they become in a situation where they cannot pay their electricity bill, the supplier is made whole. So, they walk away with next to no skin in the game. They've been made whole. But ratepayers, even those who have been on standard service or who have selected a supplier who have a more competitive rate, the cost of uncollectables is socialized across all ratepayers, so everyone is paying for that higher rate.

REP. ARCONTI (109TH): So, what means if the suppliers always made whole? What's their incentive from working hard to make sure the next rate, after that first term teaser rate, stays the same or doesn't go up by a ton? Because when you're throwing out \$0.20 cents a kilowatt hour, that should take a lot of people by -- raise alarm bells for a lot of people.

MARISSA GILLETT: We think it does, and we have done what we feel -- we feel that we have done as much as we can under current legislation to impose customer protections where a supplier has to close the next cycle rate and that has resulted in numerous investigations as I alluded to, and unfortunately, we don't think there is an incentive for the suppliers. I think what you'll hear later today against removing the automatic renewal provision is that suppliers have customer acquisition costs. And I think you will hear a testimony that customer acquisition costs are not something that the utilities have to face.

But on the flip side, the suppliers are made whole through a program called the purchase of receivables. They don't have to pay collection costs. They get all that money back. So, if they're allowed to continuously renew and there's no protections are provisions around what that renewal rate is at, because we do not regulate the prices that they charge. I think that there's very little incentive and honestly if a customer has been sufficiently happy with that supplier service, we feel that they will proactively reenroll with that supplier.

We have a very innovative supplier board that's available at Energize CT that receives upwards of 20,000 customers a month visiting. So, it's not that folks are unaware of this market and, frankly, we think that the market has matured past the need for an automatic renewal provision.

REP. ARCONTI (109TH): All right. Thanks for that. And one more question [inaudible] Bill, we've had this version of this Bill in front of us for last couple sessions and obviously, 2020 just ended, all together. But in the past, suppliers supported to Texas as a place of innovation without a standard service. Considering current events, could you give the flip side of that equation now for Members of the Committee?

MARISSA GILLETT: I would be happy to, and I think that flip side is very real, and I think what folks may remember dating back to the 2014 era when the polar vortex happened, we saw something on a less dramatic scale, but still the same phenomenon, where in Texas, there is no standard service rate. Meaning that you as a residential customer must select a supplier and many of the suppliers use variable rates which are tied to the wholesale rate.

So, if you've seen the news over the past week, it's hard not to -- you've seen Texas customers receiving bills of \$17,000. They've been astronomical and that's because it is a pass-through rate from the supplier that they have marked up and it's tied to the wholesale market. And if you don't have the option to go to standard service and you're looking from supplier to supplier -- all the suppliers are tied to the wholesale market -- that's where you end up with those kinds of massive bills.

Now on the flip side is the suppliers have mentioned the innovative products that can come from a market like in Texas. I respectfully offer that through our equitable modern grid proceedings right now. We are making great strides towards being able to offer those types of innovative products here. Many of which have to be enabled by advanced metering infrastructure and we're looking to deploy that for all customers, so the innovative products could be offered by suppliers here. They could also be offered by the incumbent utilities.

So, I think that the Committee should be aware that there's a very real risk in what happened in Texas with those Bills. It certainly could happen here if variable rates had continued.

REP. ARCONTI (109TH): Thanks. Thanks for that. Then moving on to the storage component of 952 -- I think it is. I haven't memorized all of the numbers, yet. I know PURA is doing a lot of work in

[inaudible]. I know there's a reopen around storage, but I think it's important to codify these goals. Do you agree with that? And if you do, why is it important for the industry, for us to do that?

MARISSA GILLETT: I couldn't agree with you more. As you certainly know, in my stopover, after working at the Maryland Public Service Commission, I worked at the Energy Storage Association. So, storage is certainly near and dear to my heart. And I say over the past couple years, states across the country have acted to adapt goals, or targets, or mandates. So, we would we would not be alone in the states that have adapted goals, like the ones that are laid out in this legislation.

It's a very important long-term signal that you send to the market and it helps PURA dramatically because, in the context of the proceedings that we have, if we are receiving public policy guidance from the Committee in terms of these goals and where you want to go, it allows us to use that as an input to developing a cost-effective program at our side. So, memorializing those targets are good for not just industry, but for us and ultimately, I think, for delivering the most cost-effective program to rate pairs. So, I recommend it to the Committee.

REP. ARCONTI (109TH): Great. Thanks. I do want to walk through some VNM stuff just real quick. Some numbers, I received from DEEP's energy team on VNM and the cost in VNM in particular. The non-REC portion is \$0.14 to \$0.50 cents a kilowatt hour, and when you add indirect costs, which I'm told developers get separately through the ZREC Program, the all-in cost for VNM is \$0.20 to \$0.22 cents a kilowatt hour.

Now, it's my understanding that the cost recovery through that gets built into the FMCC component of ratepayers' bills. Is that accurate?



MARISSA GILLETT: Yes, you are almost all the way there. I'm going to take the opportunity to just say the FMCC, sometimes also referred to as the MBFMCC. There's slight terminology differences between the utilities. That component of the customer's Bill recovers -- the last time I looked, 23 different public policy drivers in there and VNM or net metering generally, that shows up in in two ways on a customer's bill.

Net metering can manifest itself as lost revenue for the company. So, that's recovered through the decoupling component of the bill. And then we also have one of our two utilities that we are actually investing in this component. One of the two utilities has booked some of the sales that they are purchasing through VNM as an expense in there in the NBFMCC and that's something that we are investigating to make sure they're not double-recovering. But it's important and I'm happy at any time to walk through what the cost recovery ramifications of any of the public policy components that you've considered today or would be considering in the future.

Because they are recovered from all repairs on the delivery side of your bill, which can be counterintuitive. So, we are looking into that.

REP. ARCONTI (109TH): Great. That's helpful. It's something I've tried to highlight as a cautionary tale for members. I do want to commend you on the residential solar tariff docket. I think whatever Committee Members that were around back in 2018; we heard that it was going to potentially be the death of the residential solar industry here in the state. Yet, reading some of the reporting after the decision has been announced [inaudible] everyone was singing praises on PURA's work on balancing the value of the tariff and what the residential solar industry is going to need to be to flourish in our state.

So, I want to commend you for your work there, and I know you're now undergoing the same type of docket right on the commercial side, the C&I customers. And maybe just a quick recap for Committee Members, VNM is being reformed. So, there are still going to be an opportunity, come January, for commercial developers in our State to be here, and be active, and deploy solar. And it seemed that the residential industry guys were very engaged in your docket there. Is it similar with the commercial developers on level of engagement thus far?

Because people signed up to testify today and just a heads up to everybody, I'm going to be asking everybody, all the developers if you're engaging in that docket.

MARISSA GILLETT: I really appreciate the question and I definitely am fortunate to have some dedicated staff that helped produce the result in the residential side that we are looking to mirror on the non-residential side. We are just kicking off that docket. It's 200701, according to Public Act of 1935, which was the same act that gave us the guidance on the Resi side.

Section 3 of that Public Act or X PURA to evaluate and establish procurement plans that both of the utilities will have to use to develop these 'successor programs' for both the current LREC, ZREC, as well as VNM. We are now in the last statutorily authorized year of the current programs and the successor programs that will be established through our docket would be affected for seven years, starting January 1 of next year.

The major difference between previous LREC, ZREC and VNM programs versus what the successor programs are looking towards under the Public Act's direction are that we are required to provide two different types of tariff of options. But more importantly, the successor program is required to allow certain customers to virtually net meter under the program.

Right now, you have to separately apply between the two programs.

And the third very important difference is that LREC, ZREC and VNM currently are designed with monetary caps and under the new design and the legislation from several years ago, it imposes megawatt caps. And I think from a personal perspective megawatt caps, I think, are more appropriate for an evolving field and to get the second part of your question regarding the level of engagement.

I would say that there is still time for folks to engage. We're just in the beginning parts of that phase of the docket. I would say that while we had fantastic engagement from many stakeholders and the first part that that certainly it would look to scale up the engagement and the second half, which is something we've been very dedicated to accelerating participation on our dockets generally. So, there's still time and we can talk offline with any developer who needs procedural help intervening in our dockets.

REP. ARCONTI (109TH): Great. Thanks for that. One more question and I'll kick it over to Senator Needleman, on Senate Bill 937, the make safe Bill. I know you're in the middle of the investigation right now from last August's tropical storm Isaias and your response there. But would you be able to offer general feedback on what you're kind of preaching on the make-safe process. I know you're kind of tied up because of the actual investigation, but anything you could share with the Committee would be helpful.

MARISSA GILLETT: Sure. I really appreciate the question and I'll just take a moment to say for those that aren't familiar with the investigation, it's been going on since last August regarding the electric utilities, preparation and response to that tropical storm. We've completed the public

hearings, which I know many of you either testified at live or submitted written comments to. We've had weeks of evidentiary hearings and we are in schedule to issue a draft decision by March 19.

I know there has been a lot of press recently regarding cost recovery and other things. Please know that pure silence on the matter is not intended as a signal, one way or the other, but because you know we are quasi-judicial agency, we can't prejudge or speculate how we're going to roll. And because of that, what I would offer on the make safe without prejudging it is just reflecting what publicly-filed testimony has been on the matter, and I would say that we received almost universal disappointment with respect to the mix tape process and how it was executed or not executed last August.

And again, I'm not intending to say that as finding a fact at this moment. I'm just reflecting what has been filed in our docket and for that reason we filed written testimony in support at that Bill. We have offered a few amendments that we think would be helpful to expand the process for stakeholder feedback at PURA, but we are in support of that legislation.

REP. ARCONTI (109TH): Thanks for that. I'll kick it over to Senator Needleman.

SENATOR NEEDLEMAN (33RD): Thank you so much, Chairman Arconti and thank you so much, Chairwoman Gillett for coming here and testifying. I want to make more of a statement that I think it's not often said, and that is that you are doing something that has not been done in a while. You have a vast experience and knowledgeable voice on so many issues. But in your primary function as a trained regulator, you are working to be fair to both the ratepayers and the utilities and try to get to a point where they're held accountable and do their job better for the residents of the State of Connecticut.

And that is something that I know I, and David, and the Ranking Members, and all of the residents of the State of Connecticut and are greatly appreciative of. I also know that we're trying to sort of maneuver an aircraft carrier in a tight space and it's not easy to do that and there's a long-standing momentum going in a certain direction. So, it's a multipronged effect with not only the electric companies but across all the platforms, they regulate and I appreciate that -- plus your experience in solar industry and it's greatly appreciated.

It's an important perspective that we need to have out there in the public and I can say honestly when I talked to you or when I talked to Commissioner Dykes, I always learn new stuff. It's great to have cutting edge people here in Connecticut that are moving us forward, although we don't always agree on how to get to the place that we want to get to, we all want to get to that place and honestly, I think one of the great things about Connecticut is that true virtually every member of both parties. So, that's really different and I'm greatly appreciative of that.

Obviously, we're all also working as well as on the climate change calls on the resiliency aspects of how do we get there, how do we transition to renewables, how do we make sure that we mitigate that against cost and I think there are a lot of good minds here that play on that and I just want to let you know that I appreciate that. At least I feel that you're one of the better ones.

Moving forward, all voices should be heard in this conversation. There's a lot that we all have to do, we need the best voice that we can have speaking loudly. As far as just slightly off the topic of the Bills, the virtual net metering issue is a benefit to municipalities, and also benefit to the grid and to our climate change goals in whatever

success or program we put out there, I do know that what we have been doing is pretty expensive.

I'm hoping that it's still a benefit to the municipalities and still there's enough of it in center for people to do it. The municipalities in the State of Connecticut do not have a lot of alternative forms of revenue. It's not our goal and not your goal to make sure that they have a new revenue sharing, but it certainly has been locked out employers and so getting somewhat of revenue streams to repurpose properties that have no other valuable purpose in many cases.

So, I hope you keep that in mind. In the grand scheme of things, with all the VNM and all the residential solar projects that we've done through the old tower, it's overshooting off the cuff number. But do you have any sense of all the public policy piece of all [inaudible] cents per kilowatt hour? You know, look at VNM and [inaudible] do you have any sense of [inaudible] per kilowatt hour or is that too hard to drive?

MARISSA GILLETT: No, it's a great question and we took some time after the events of last summer to put together a resource for both Eversource customers and UI customers, they're narrated. The PowerPoints are available on our website that explain the different components of a customer's Bill and what goes into each piece and if you look at that, I think the answer that I can give you is on a percentage basis rather than a per kilowatt hour basis and looking at what is like 'public policy' on a Bill is around 20% to 30% depending on your usage.

So, like I mentioned before, there are at least 23 items that go into the largest public policy cost item on a customer's Bill and the cost attributable to VNM are just one of at least 23 Line items. So, breaking that out in terms of percentage, I would say that those are negligible, because many of the

other 23 lined items are the very large PPAs that DEEP has negotiated. But as a whole, public policy costs are between 20% and 30% of our residential customers' Bill right now.

SENATOR NEEDLEMAN (33RD): So again -- so pieces, not the lion's share of the public policy piece and to me there's offsetting benefits there and that make that those two specific programs really important. You know, I can envision a day. I think I've shared with you, I have this vision of a very unreliable grid because of so many trees in the State and at the same time, becoming more dependent on electricity going forward, which really means that onsite generation, with some backup storage is really an important part, it may be a little bit more expensive to do that and I certainly aware, the numbers but it provides a key component, which will satisfy me, and that is some level of resiliency that I just I'm terrified of the idea that we all have heat problems and we eliminate all you know other utilities in our homes.

And we buy electric vehicles and we're totally dependent on electricity, and we have a strong even like yesterday with 40 or 50 mile an hour winds and 20,000 people without power thankfully, not for an extended period of time, but long enough, so, in some cases, the onsite generation, for some of your needs, if not all of them with the ability to store that power, so that every morning you wake up and you're starting to store power again, I think goes a long way to building some security and safety into everyone's lives as, as we know, we live in a deeply wooden stage. I don't think, I have a lot of other questions again, I just want to thank you for all the hard work and for all the hard work that PURA does. You have a great team there and DEEP has a great team there and State is moving forward enhance.

REP. ARCONTI (109TH): Thanks Senator.  
Representative Ackert and vice chair Allie-Brennan.

REP. ACKERT (8TH): Thank you Mr. Chairman. Thank you, Chairwoman Gillette, for being here, as always, I know you don't have a choice in some cases, and we really appreciate your work that you do. I have a couple questions, starting with the third party rate, you know we've been putting in legislation, year after year in some manner and I'm curious have we seen a decline in people using third party or as you thought about the complaints that you have are pretty high, and so I was wondering, we actually did any of our work in the past that we work pretty hard and have any effect or and I see this is quite comprehensive, what I'm looking at in legislation here. So, I'd like to start with, that if we see that the client at all.

MARISSA GILLETT: Yes, absolutely and I want to be clear to that, I think, because of the Committee's hard work and the legislation that was passed, you know, which predates my tenure. I would view that as having given PURA that teeth to hold that market accountable and I also want to be clear that it's not PURA's intent to kill that market, so I don't want to say that it was our, that that our goal should be to see a decrease in the use of folks with their price of players, our goal is to hold them accountable and I think the biggest drop that you saw and the percentage of customers on third party suppliers, probably came after the first time that you pass the legislation that prohibited new variable rate contracts, and I think that you'll see an even further drop when we, you know, should the Committee choose to either pass this legislation, as drafted and get rid of the automatic renewal provision and its entirety, or at least remove it with respect to the continued reliance on variable rates.

So again, with the tools that you have empowered PURA to use over the past two years, what you've



seen is as hold suppliers accountable with multimillion dollar judgments and further a piece of legislation that was included in the take back our grid act allowed PURA to allow peer on a going forward basis. The ability to order restitution, which we couldn't previously do, so when we found suppliers at fault, we had to issue a fine that was returned to the general fund, now we can hold them specifically accountable, so that they have to return that money and the form of a Bill credit to customers who they have harmed. So, I applaud the Committee for the work you've done so far and assure you that we feel what's before you right now is a comprehensive approach to get us over the finish line.

REP. ACKERT (8TH): Excellent Thank you and I've been on this Committee and we've been working on for the guys, my ninth year possibly so and then back to, I almost was thinking in a manner of, you know, we did the 25%, you can't go up more than 25% at each, they got a three month contract or something. What if there was something and this is just throwing it out there. A percentage that you can no longer you cannot charge a percentage greater than standard offer as a CAP. And I hate CAPS because I'm going to bring up virtual that be bigger than itself on the whole CAP thing, but I just throwing that out there just at some point you're saying you know, we spent a lot of time on these third party and I took advantage of them.

I had I had an all-electric heat house and I took advantage of that offer as anytime that it could, of course, I was one of the ones that you know forgot and then I was paying 17 cents, as I think my teaser rate to start with, was six cents and I was paying 17 cents and I got that and it was winter, in an electric house, so I've changed since then so, but so just to throw on that as something you may be, you know they can charge no more than this amount or something.

MARISSA GILLETT: Yes, Representative Ackert, we want to do by you, to a portion of the bill, where we have so previously, the Committee had instructed PURA to have an investigation for hardship customers, and these are our residential customers who are typically have limited means, and in that legislations, that if we found that those customers were not receiving a benefit from being on third party suppliers, that we were to return them to standard service and in the course of that proceeding, we found that 78% of hardship customers were being charged well in excess of standard service in over two year period paid \$8 million dollars more on suppliers and they should have, which harms.

Let me reemphasize a point that Representative Arconti, draw earlier about and collectibles, it harms all customers, because it takes away resources from the Energy Assistance programs and also raises the collectibles for that are socialized across all right pairs and this bill, what we have said is that we did hear from not a significant number of customers, but we did hear from some customers calling in saying that our hardship customers, saying that they were you know disappointed in the lack of choice that they now have and we offered them the opportunity to waive their hardship status, if they wanted, that they felt that strongly about returning to third party suppliers.

What we're doing in this Bill is asking you to consider empowering PURA to make an option, because we have to revisit this issue every two years, so we've included language that said instead of being a binary choice between staying with the supplier or going to standard service, we've inserted a third option of they could stay with the supplier if the supplier charge no more than standard service, and we think that that's a balance that stripes, the appropriate balance

between protections for all right pairs, so I hope that was helpful.

REP. ACKERT (8TH): Absolutely yeah because I mean, obviously we have the light heat fun, where we support, you know, that we get federal funds and we transfer those federal funds into those that are, you know, a low income, we don't tell them how they can spend it, you know, in terms of obviously it's for heat or you know whatever heat that may be so, yeah there's an investment on our side of support, but then we don't want it to go just to the, you know to high energy costs for those customers that we can use for more people we needed to so.

And thank you for that on that bill, and then the make safe one and, of course, you know I can only have so many devices open here, so I can't jump around too many, so I have two i-pads going plus this thing. The lines 14 through 22 let's see if I can make safe cruise. Oh yeah, I think part of that is that identifying how many crews, you need, of course, for a Community, but obviously not in many storm cases that that all the storms aren't in you know covered all of Connecticut. You know let's say it's a shoreline one that that that plan is designed to also say, and then, if crews are needed, you know in my community and, obviously, that that plan looks at.

You know, and I know that they do this they're professionals and Eversource and you either professionals but just kind of saying that obviously you know you got I know I'm staying. You know in Tolland, Connecticut, well there's no power yeah but that's where I'm staying, you know, so making sure that they do that and I know that they are towns line 23 of that bill, it talks about you know, creating a developing emergency response plan, I know that but, but in work in.

Working with the communities, because the communities know their towns substantially better

you know, and I know, and I know that the goal of every source united illuminating goal is to get as many people back on. But, in some cases there is a specific need for maybe not the true number, but also the critical areas that need to be turned back on in a response, so making sure that that that that is that plan takes into consideration the town needs.

MARISSA GILLETT: Yes, Representative, and I think I would I would offer to you, we filed some amendments in our written testimony that I think would ensure that PURA has I put flexibility to accommodate that two issues that you just flagged for us. And they're very minor but it instructs us to you know consider instead of definitively establish and then It empowers us specifically with a line that such plan developed, you know personal into that sub section shall be subject appears review, modification, and approval and I flagged that for you, because even though it seems, you know like a small thing.

A lot of the language that I've encountered since taking this position, two years ago doesn't always empower PURA to modify. It often gives us a very binary choice of you shall approve or actually there's no choice, it's you shall approve if, and I think that really hamstrings PURA and the expertise of our staff in a way that I don't think that you intend, so I think the issues that you flagged for us are the exactly right ones, and you know if you show choose to pursue this legislation, we respectfully ask that you consider our modifications, for that reason.

REP. ACKERT (8TH): Thank you, thank you for that and now Secretary did you come in and section to at all in that Bill it's, it's the one that I have a little pause on its lines 55 from 59 and it talks about the removal of overhead lines, as I

shall online 58. Now I have a commercial building and if I had a, you know, a line going to my building and that wasn't being used, in other words, I terminated use of that, but you know, maybe the new tenant coming in. You know that you know, the new tenant coming in, you know that moves in wants service that they provided they would have to come back out and run a line.

So, I would think that in this case here, I would say, you know by request of the property owner on, in that section, if you just because this I'm sick and tired of looking at it, too, because I go to right now, if I go to, you know, because I'm in the construction business. If I go to 10 houses, I get that nine of them don't have a phone line. But they have a phone line you know paper, they have a phone line going to their house and I get it by request it should be that's on my thoughts would be on that, rather than because you don't know what the you know you know just in terms of making a mandate, not making the mandate, mandated. Mandate it if they requested it, though.

MARISSA GILLETT: We did not comment on that bill, we see this as a policy, this kind of Committee and I didn't know issue with your suggestions.

REP. ACKERT (8TH): Thank you, and then I've just a virtual net metering you know we, I would like, Chair Arconti and Chair Needleman, you know make great comments on this. I just see that the opportunity that if I communities can do more virtual net metering, it reduces the cost of the Community driving down some of the taxes at the property owners have so I'll just throw that out there with my thoughts on virtual net metering so, thank you again, Mr. Chair and Chairwoman, thank you for your time, as always.

REP. ARCONTI (109TH): Thanks rep. Vice Chair Allie

Brennan, then Representative Meskers and Senator Haskell.

REP. ALLIE-BRENNAN (2ND): Thank you, Mr. Chair. Good afternoon Commissioner. I just had a quick question. I know the RP does not speak to transmission costs, and I was just curious if you knew, you know when it comes to new out of State generation, do you know how much transmission costs will cost repairs.

MARISSA GILLETT: That's a great, that's a great question, so the transmission rates are set by the Federal equivalent of a PURA so far, the Federal energy regulatory Commission and those are line item on a customer's Bill and believe it's the TAC transmission and just make clause and PURA does not have an estimate of what those increased transmission costs are and my expectation would be that Commissioner Dykes, since IRP is a, is a deep document but I'd be happy to flag that question for Commissioner Dykes since they have taken follow up offline.

REP. ALLIE-BRENNAN (2ND): Please do, I thought I figured you were the right person, so I.

MARISSA GILLETT: No, I apologize, its, it's you know, know the energy world is a very confusing area of who regulates, why, and while we do see the rates that are put on a customer's Bill through our annual reconciling it, reconciling administrative mechanism proceeding, we have zero authority to alter that rate. That jurisdiction belongs to our federal counterparts, so it's really just one of those passed through that costs but you'd be surprised how many line items on a customer's Bill are true, truly out of PURA's jurisdiction but I'd be happy to follow up with the appropriate folks and get your written response.

REP. ALLIE-BRENNAN (2ND): Please do, thank you, thank you, Mr. Chair.

REP. ARCONTI (109TH): Thank you. Representative, Rep Meskers.

REP. MESKERS (150TH): You know, thank you Chairman Arconti and Commissioner Gilbert is it Chairwoman or Commissioner.

MARISSA GILLETT: It's chair.

REP. MESKERS (150TH): Okay, fine. I apologize for that. I've heard it both ways and I wanted to get clarity. I want to thank you for the work you've done, I thought it's been tremendously insightful and helpful and I know you're in the midst, and now you just commented on the regulatory review. On the back of EZEYAZ, so I have a specific request and so it's not something I want, I needed to comment or do anything on today, so they to make it easier. I think there's structurally, I want to, I want to understand what you think when you finish the exercise.

And you establish that there is or is it liability in terms of performance based the storm and their ability to recover. I want to make sure that you feel that you've got the regulatory framework, now that allows you to do that. My two concerns on your role in the regular, in the regulation of our utility companies is in relation to the sharing of risk on performance based, on performance-based metrics between the shareholders and the ratepayers. And also, I would love to go further with you at some point in the benchmarking on return on assets or the return, or the investable return that every source is allowed and some thoughts on is that the appropriate mechanism to encourage them, to reduce the cost of distributed energy.

My concern in the modeling is if I, if I have a 7% or 8% or 6%- and three-quarter percent return on capital deployment that in the current market at a 1% or 2% interest rate, I'm going to invest every dollar I can in the system if I've got a six and three quarter 7% return. So, I want to make sure we're incentivizing the utility to make more money when they're reducing my distribution costs versus that the only way they can make more money is increasing my distribution costs and maybe on that part of the framework, I'd like to I'd like to give you the comment on that.

MARISSA GILLETT: Absolutely, and I look forward to continuing to discuss that with both you and the Committee as a whole. I do want to fly for Committee's attention, we have a second person, well, we have 107 active dockets right now, but in addition to the storm investigation, another one that we have is the 11th trap of our grid mod, and it is looking at it and pursuant to the take back our grid act. We're looking at an interim rate decrease, as well as establishing a low income discount rate and economic development tariff rate and addressing what is known as the rate 30 issue which affects small businesses, municipalities and in the Eversource territory.

So we do have an established public timeline on those with it it's two phases, but the second phase will be included by early July, and so in in those dockets, we will be exploring some of what you touched on Representative, with respect to you the return on equity of the two utilities, but those issues are your normally reserved for full blown rate cases of which we would expect both Eversource and UI to file later this year early next year, so we will conclude also, the investigation into the storm proceeding as well as if warranted the penalty phase of that proceeding by midsummer as well.



So, as you know, once a docket is concluded, then the Commissioners are at liberty to discuss the findings of that report, and before then, I just have to restrict my remarks to procedural. So, I have that as an up and answer now, and happy to engage further, especially in the summer, when those dockets have concluded.

REP. MESKERS (150TH): Okay, thank you much. And then I wanted to go on to the third party energy suppliers, is a discussion, I want to thank you, encourage you, and your continued review and third party energy suppliers, I think it would help the Committee that when you come before us in the general reporting to whether it's a semiannual, annual basis we get an update on terms of the base rate and the surcharge by the, by the players in the market here, I think you highlighted concern that I've raised in the past that we focus now on the Energy Assistance market in terms of the problems with third party energy suppliers.

I think there's a question fundamentally as a regulatory authority is your licensing of third party energy suppliers; I don't know the word greed is a Committee. But the idea that, on average, if they're charging a surcharge over the base rate, one has to ask what choice we're providing consumers and whether there's value to that, so I would encourage you to continue to report there, I think the decision we made for the, to use our tax dollars to have our the defaulted, you know the energy systems market with defaulted rates going at surcharges going back to the general ratepayer it's a terrific.

I think you know that we have never going to pick up defaulted energy bills, I understand, but that they're not at the lowest possible rate is terrific. So, I'm glad you've done that, so far. I think, in lastly, I would love, further proposals on the standardization

of the contract periods. I think one of the issues in the third party energy market is the lack of transparency and comparable billing. Billing periods, so I, you made some comment about service which I didn't quite understand from third party energy suppliers, since generically there's they're giving us electrons.

So, I'm not sure what the incremental service value, you see that they provide to customers I'm, I'm open to hearing that from you, but I think standardizing the contracts makes them comparable since as far as I'm concerned whether its water or electricity, they are not differentiated product and therefore prices, the what I'm looking for from third parties, cheaper prices now higher. So, if you could mention that if you could reflect back or comment just you mentioned other services or ancillary stuff and third party, it was that intentional or is there anything comes to mind.

MARISSA GILLETT: I apologize, I may have misspoken earlier, I was just trying to distinguish between the fact that third party, third party suppliers are offering customers a choice in the supply rate and it does not at all reflect on the delivery portion of a customer's bill. I would offer that in some of the many proceedings that we've had here and I'm sure suppliers will offer this later today that they view themselves as able to provide non-energy benefits, you know, some of them offer gift cards or sometimes they offer what they call a green product that would result in a rate that's higher than standard service.

I don't know, you know speculate any further, I'm sure they'll offer their own opinions on that, but I will also say we are statutorily required to report to you on the status of the

third party supplier market once a year, and I think it's in the April timeline, so we will make sure that we reflect on your questions and comments today and provide adequate detail in that forthcoming report.

REP. MESKERS (150TH): Yeah, whatever I've seen in the base, I'll finish up. I apologize Chair. What I've seen in the past, has been a term related to grow surcharges, I don't know how difficult it is to figure out the I mean I think it's a net surcharge. I don't think we get a growth surcharge figure, because as Representative Ackert mentioned, even in my district, I've heard from five to 10, you know people are maggots five roughly, who've told me how they love the third party market because they basically serve the market and change suppliers on every calendar period and they often, they seem to get that introductory discount. But the average customer seems to be paying a surcharge, so I'd like to know what the gross and what the Net is because you know I think I get the Net and it even the \$57 million dollar numbers what I hear.

MARISSA GILLETT: I see. Yeah, I understand now and I don't have the that figure right now, except to say, I do have that figure for the hardship customers because that one's top of mine from the most recent investigation, we did and that was that \$8 million dollar number that hardship customers over the course of two years had paid \$8 million dollars more than they would have, had they been on standard service.

REP. MESKERS (150TH): What percentage of the market, oh sorry. I'll finish them.

MARISSA GILLETT: Hardship customers, let me see if attorney, my staff member with me remembers that I think it's about.

REP. MESKERS (150TH): Five to 10% of the market.

KIMBERLY WHITE: Yes, Sir, approximately.

REP. MESKERS (150TH): All right, so basically the surcharge of you projected out could be as high as 80 million dollars if you if it's running on the same ratios Okay, thank you.

REP. ARCONTI (109TH): Senator Haskell.

SENATOR HASKELL (26TH): Thank you so much, Mr. Chair, I turn my video off there we go and thank you Chairwoman for being with us and for bringing your expertise to the Committee today, I've being so generous with your time. I just have one very quick question for you. I noticed that a lot of the first selectman and select women in my district are signed up to testify today regarding SB 937 and you know, given the fact that they're going to come way later in the day, I wanted to just give you an opportunity to respond to some of the concerns that they raised in their testimony.

Obviously you were incredibly involved in in helping the Chairs, draft to take back our grid act in the wake of that tropical storm, one thing that we saw down in Fairfield county, is that I make safe crews were really not available for some time in the wake of that tropical storm, something I know you're very aware of so, my question, I guess, is what effort is PURA making to encourage utilities like Eversource in our area to work more closely with municipal leaders to get more make safe crews on the ground, working in the Community clearing down power lines after storms.

MARISSA GILLETT: I really thank you for the question and I want to amend the first selectman and you know town officials who participated in our storm investigation, there were several towns, who officially intervened, which is incredibly important because PURA is required to make a

decision on the record evidence and so if we don't have parties, you know, representing multiple viewpoints, we simply cannot reach a balanced decision.

So, for all of those town officials who participated both formally and by providing written and verbal comments, I want to assure them that myself and my fellow Commissioners heard them and are taking that into consideration in our deliberations. So once PURA's investigation concludes and again we're on schedule, which has a draft decision due March 19, you will see our official findings of fact on what we think that the utility both Eversource in you, I did and did not do.

Some recommendations, perhaps some recommendations on what could be done better. PURS's decisions are legally binding their appeal will disappear your court, so we are in support of Senate Bill 937 because we think that it's heading in the appropriate direction and we look forward to continuing to engage with the municipalities, whether it's through CCM or through cost or on an individual basis, to make sure that their voices are incorporated into our proceeding, and so I just want to commend them again, and thank you for the question.

SENATOR HASKELL (26TH): That's really encouraging to hear that. I thank you Chairwoman and I'm, I'll be clearing my schedule for March 19 that's not so not so far away now, thanks for your testimony this morning. Thanks Mr. Jack.

REP. ARCONTI (109TH): Thanks Senator. Then clear it again when the final decision comes out in April. Representative Arora.

REP. ARORA (151ST): Thank you, Mr. Chair and thank you, Madam, Chair, Madam Chair of PURA for

your testimony. Can you, you can hear me right.

REP. ARCONTI (109TH): We can hear you. We can't see you.

REP. ARORA (151ST): Yeah, I'm muted for a long time, so now, thank you. Madam Chair, I have first of all thank you for all you do. I think, it's been really great to see, do read the some of the, especially the docket on the renewables stand, a renewable price which you recently have provided, and I really do appreciate the amount of transparency that PURA is bringing to the table here.

Now, I just wanted to have a few questions, the first one you just mentioned that there are 23 public policy drivers, which comprise 20% to 30% of the bill. You know that translates to maybe four or five cents, or when I'm just calculating by the fact that we consume 30 million megawatt hours in this state, you know that comes down to over a billion dollars, is that is that does that sound right, that we have increased, we are pushing a billion dollars' worth of costs on to the bill, which perhaps or just your public policy choices.

MARISSA GILLETT: Thank you for the question and you know I see PURA's role here as explaining the cost recovery and the ramifications and I defer to you and your colleagues on the appropriateness of the policy. I will offer that you know I think one of the things that PURA is looking at doing as a result of the preceding we had last year around the July rate increases, is that we've ordered a comprehensive redesign of the customers' bills, we have a draft due to US, in early September, I believe, and what we hope to do through that, is providing enhanced transparency. Because, I think folks right now, see supply versus delivery, and they don't understand, how much of, what is lumped into the delivery portion of the Bill is, you

know, truly associated with the driver,

So, without making a statement on the appropriateness of the pellet policies, I do think that we have a ways to go in terms, of providing transparency, and one thing that electric bills will never be able to do, is demonstrate the benefits that come from, you know, these public policies, and electric Bill by design is providing you, just the cost perspective.

So, we're also continuing to work on, how we would illustrate the company benefits, so I apologize that's a lengthy non-answer.

REP. ARORA (151ST): No, I'm sorry, I didn't have the video, and I just noticed, you know, thank you for that answer. The question is, which I asked you and I totally understand your point of view, that we are to make policy, and your to basically tell us, what the consequences of the policy are? And how it is comparatively done, or what the good practices in some sense? And, you know, I had not really many in this Committee, or many of our constituents did not, do not realize that it's five cents, it's a billion and a half dollars.

So, my question and there are things like Connecticut innovations, which is totally unconnected to the rate bill, which is in the rate bill. And my question to you, is our other States to use the rate bill, as some kind of Appropriation tag, you know, I don't want to say, we are doing this, it's not you, it's, we want your advisor on, are we doing this wrong, are other states using the Bill as putting Connecticut some venture capital fire.

You know, initiative and efficiency programs, for example, the efficiency programs, only who use them, whereas other people, who already have efficient homes, and efficient system, and might have paid much more for them, they basically also have to

share in that costs, which does not seem fair to me. So, my question is, I'm not against offensive efficiency programs, my question to you is; how do other people do it, how do other states do it?

Do they jump all of this in a good stuff, but not related stuff in the rate bill? Or do they actually go to the Appropriations Committee and basically asked for the money to do those programs?

MARISSA GILLETT: That is a fantastic question, I can answer them most competently, from the perspective of Maryland having spent, you know, almost a decade at that Commission, before coming to Connecticut. I would offer that, I think states are probably all over the map, but one thing that I noticed when, you know, it's commonly touted, is that Connecticut isn't, you know, the very bottom in terms of price per kilowatt hour.

And one of the things, that what is, not reflected in those rankings, is a comparison of, you know, what goes into that rate, is it public policy, is it straight costs? Let's say the questions, a little bit difficult to answer from the perspective, how states are regulated? Where there are many states that are still fully regulated, so they have much more control over, what I'm, you know, that generation portfolio is? But, it's not uncommon that states have energy efficiency, as part of a customer's bill, as to some of the other public policies.

I think, what I would offer is, I'm committed on a going forward basis to try, and explain to Committee, where and how these costs are going to be recovered on a bill, and defer to you on the policy choice of whether that's appropriate. And I'd say besides that, there is I'd say the states are just literally all over the map, in terms of what goes into a rate, but I think, it's fair to say, that if you're trying to use the State rankings on a price per kilowatt hour basis. Can you just simply, can't



compare Connecticut with, I don't know, mid-Michigan, for example on, and all in basis, because we just have totally different things, that are incorporated into our electricity rates.

REP. ARORA (151ST): Yes, and that's, thank you, so much for that answer, because that's what my constituents are telling me, this saying listen, you know, if they are things, which are not rate related in the rate. Please go, and go to the Appropriations, and go to the tax process, or the Appropriation process do not with a tap in some sense, push things into the rate bill, and they really do appreciate your effort in transparency. So, that at least they can see how much it is? Because, perhaps, if it was a fraction of a penny, they may basically, say okay, maybe it's right, but then we hear that it could be five cents, or 20% to 30%, I think they will once you disclose, once you provide that transparency, they will be asking us hard question that this needs to be taken out of the bill, and funded different ways.

Now, I thank you for that clarification Madam chair, I want to ask a similar line of question on the solar subsidy, or the solar tariffs, which you know, I think what you're doing is quite significant and really good there. But what I'm told that there is about 100 million subsidy, because we have about 500,000 megawatt hours, you know, being subsidized about 10 cents of 14 cents, something like that between net metering virtual net metering, and so on, so for. Now, the question, which I have for you, is so really, we are paying for those 500,000 megawatt hours, you know, extra 14 cents, that's what some people say, it's, you know, it's a number being bandied around.

The question is, what is, they do, we have a transparency, or a knowledge at what is the rate, at which developers can develop solar generation in the State of Connecticut, without transparency, and without subsidy, in a sense, what is the price

that's needed? Because, some of this is really high, we need that transparency, do you have information in the course of the rate setting, where you could tell us, what is the market price, right now, where is the market right now?

MARISSA GILLETT: And this is obviously a great and fantastic question, when my jazz, when PURA was created, and DEEP was created, that the responsibility for what you're discussing, now, is under DEEP's brother, they conduct the grid scale procurements for resources. And way to have that pricing information, we at pure do not regulate the rates of, you know, a non-utility providers are for resources.

So, I couldn't confidently answer your question, although in, I'm happy to defer, I'm happy to connect with Commission, and I explained to make sure that they heard your question.

REP. ARORA (151ST): The reason, I brought bring this up is because, since we will be having some parents, that if for solar production, for solar generation. You know, I think it's important, that those chairs be set in some transparent auction process. Because, if we do not understand, what the market prices, obviously, I can tell you, the industry will tell us, that the market rises 20 cents, they can't make any money, at least 20 cents, and perhaps, you know, the consumer will tell us, it's maybe 10 cents.

So, I, my point is that, is it not appropriate that from you that Tara, if you use some kind of an auction process to ensure that needed to be under pay. But, at the same time, we should make sure that there is an appropriate rate of return, which our very hard entrepreneur's solar developers make. So, may I suggest, for your consideration that some kind of an auction-based process, which is transparent to all, you followed in such a rage setting process. Because, in any case whether, you,

as you said, you will be choosing that rate or that rate of return when you chose it.

MARISSA GILLETT: Yes, thank you, and I apologize, I misunderstood your question, to begin with, that we were talking about grid scale procurements under the tariffs for the successor programs that we just completed for residential, and we'll be doing for the non-residential customers. We are setting in that tear of development process, and the direction that came from us that came from you all, through public ACT, 1935 gives us, significant direction on that item, and I think we've been in our in our ready tariffs outlined, you know, objectives and sentiments that married.

What I heard, you just alluded to, so I apologize for the confusion on the initial answer, but I want to show you that our direct staff skip all of those things are done on the basis of the lowest cost option. And then, we defer to you all for appropriate guidance on adders, or specific field tapes, or other public policy costs so, and thanks for allowing me to correct the confusion there.

REP. ARORA (151ST): No, the apology should be my side, because, I was thinking about utility scale as well. So, you actually read my mind, in some ways, my question here really is that, it for a transparent process right, you know, if we knew that there were an option, which was done. And you know, it clear that let's say the standard offer plus two cents, for Rack, for any solar, for the best solar development, for the least cost solar development.

And you know, I'm in general holistic, that you know, whatever is the least cost development, even if its utility scale, that's what we should focus on. So, that you know, all solar, although we should encourage everyone, but the least cost solar should be, it should be encouraged.

My question is basically, if that transparent process for there, would you think it'd be okay, that if the utility use that same process, so seem rate? You know, that they could be allowed a smaller part, not the majority, but a small part of the solar development, because they are not, then, in that case. They are using the market rate, at which other developers are developing, so because, I want more investment in the State in Connecticut, and while I do prefer private developers, I'm not an anti-utility, either I would rather have private developers do it. But, if the utility can be encouraged to also enter it at the same price, as the others, and you know, what would you suggest, that wouldn't be a bad idea.

MARISSA GILLETT: I think your question, so we saw that portion of the bill, was that Senate Bill 952, and that would allow electric distribution companies to own solar. We don't take a position on that, other than to say that, as drafted were it would allow the utilities to rate base it, we don't think that's advisable. Because, it would allow them to earn their return on it, and if we want to go that route, we think, having them reconcile it, through the public policy line item on the bill, is more appropriate, as it doesn't yield, that I will say, that the utilities, as you know, come in and writers.

They certainly have a lot lower risk, it in some respect that allows them at times to offer, including, I think there's some normalization tax, normalization rolls around using federal incentives for all kinds of things, that allow them to, at times offer solar, you know, at prices that may be more competitive. I think, if the Committee wants to pursue that portion of the legislation, we would just ask, that you reconsider allowing the utilities to rate base the item.

REP. ARORA (151ST): Thank you. That was my final question, because, I do agree that we are opposed to

the rate basing of it. But, to the extent that we can encourage them to attract more investment, you know, we want to figure out a transparent way. Right now, it's not transparent, and we really have issue, that you do might figure out, you know, has so much. You know, ways to do things, because of their ownership of the entire system, that it would be transparent, and they may get a better deal than the private developers, and we're very averse to that happening.

Once again, thank you for all you do, I do hope to continue this part of this conversation privately, or in offline, and I really appreciate your time, and thank you, Mr. chair for the time.

SENATOR NEEDLEMAN (33RD): Thank you Representative Arora, and thank you, Madam, Chairwoman, always great to have you testify for two hours, lot of questions.

MARISSA GILLETT: Thank you have a good afternoon.

SENATOR NEEDLEMAN (33RD): You too, next step is a Representative Demicco.

REP. ARCONTI (109TH): No, we're going to the -- we're going to go to the public that rules are gone back and forth from the public to public officials.

SENATOR NEEDLEMAN (33RD): So, I'm gonna let, Will - - let -- Will, want to take a little.

SENATOR NEEDLEMAN (33RD): Will, go ahead.

WILL GINN: Yeah, sorry about that, so as a just have we're going to start going back, and forth between members of the public, in public officials out for members of the public, Tom, please remember that it's going to be three minutes for your remarks, and then I'll give you a warning, and cut you off there.

First up, we have Eric Virkler, and followed by Representative Demicco.

ERIC VIRKLER: Good afternoon, members of the energy and Technology Committee, my name is Eric Virkler, as you mentioned, and I'm the Director of Commercial Solar at Earth-Late Technologies, and now we've been able to grow our business providing good jobs from any State residents as a direct result of the solar energy programs, I'm speaking today in support of SB 952 for a couple different reasons.

I support solar energy storage goals, do the positive impact energy storage will have on the resiliency of our grid business owners, frequently express interest to me, and installing storage, and he asked for my advice, without a commercial battery incentive program, I tell them that the costs at this point. So, let's see the benefits need to keep in mind that goals are great, but, they're not worth anything, if there's not a clear path to achieving those goals, something I believe, Representative acid mentioned earlier, we currently have solar goals in the state, yet, there are caps on virtual mirroring, which work against the very similar goals that State has set for many projects, that have come before us over these last few years, since virtual metering has his cat that did not move forward to that CAP.

I know that the many products sitting in the queue right now, but there are many more products, and not even get this far, in certainty about whether, or not that virtual net metering CAP would ever be lifted prevented those products from ever getting off the ground. We're currently working with the municipality in the State to develop a micro grid combining solar and battery storage to power, many of their buildings. They've already obtained is the wreck, and they need the VM CAP to be lifted to move forward, they're currently in the queue waiting long with mini megawatts of other projects.

They waited, so long, that there's the REP award has a delivery term start date of April 1, of this year, it means that four weeks from today, this project will start losing zero payments, and the products still stuck in the Vienna, and log jam. Well, I support raising the CAP, I fear that the capital hit its limit the moment, it opens due to the mini megawatts already waiting all that does is create the same situation, that we've been in for the last two years. We really want to be sitting here one year from now, having the same discussion making the same arguments to raise the CAP again.

I'm in favor of actually fixing the problem now, and save ourselves a lot of time, and effort down the road. Also, I'd like to thank the Committee for to vote on Tuesday in support of separating period, from DEEP having it's a great step in the right direction, and will ultimately lead to lower energy costs and the state.

SB 952 also asked the same to agencies to investigate solar energy development programs, but only have a completely independent review, and investigation appears allowed to work, unencumbered by DEEP, and DEEP interest thanks for your time this morning, and your efforts on this bill.

SENATOR NEEDLEMAN (33RD): Thank you, well present the content.

REP. ARCONTI (109TH): Thanks, Eric. Thanks for your testimony, and just a couple of questions here. So, are you participating in the docket over up here, so far, on the on the success, or program through VNM because, we won't be in this situation, next year, because there'll be a new program, so this curious of Earthlight is taking part in that?

ERIC VIRKLER: So, we're participating through SolarCon, we meet regularly with SolarCon and have talked to them multiple times about the program that's coming, and then the collaborative efforts

SolarCon has been talking with the topic here, but they also have been talking directly with utility.

REP. ARCONTI (109TH): Great, now that's helpful to know definitely, want to make sure this all the developers rather through the association, or individually are participating in that docket. Because, it's important, and you know, when it comes to the queue right there's no statutory requirement for the developers to go out, and build this queue right, so you go to the municipalities build a queue, that the programs fall, and then come to us asking for a CAP increase.

ERIC VIRKLER: I'm sorry you broke up a little bit on my connection. I missed part of the question.

REP. ARCONTI (109TH): No problem. So, my question is in regards to the queue, I'm, to my knowledge there's no statutory requirement, that directs the developers to go into Mr., penalties, to quote unquote fill up the queue on, but it seems to be the strategy is to try to try to build a queue knowing, that the program has already fall, and then come to the legislature, and try to renew a CAP.

ERIC VIRKLER: Oh, you ask, you that's our strategy

REP. ARCONTI (109TH): Yeah.

ERIC VIRKLER: So, we just take the projects that come to us, and explain to them, the way that they could benefit from solar, and advertisement meeting was one of those options, we explained to them. That there is a CAP, they can't actively, you know, there is not an open path forward, unless they were to just sit, and wait and the queue hoping that sometimes it would get. So, we're not actively filling up the Q, we actually have one just one project sitting in the queue.

REP. ARCONTI (109TH): So...



ERIC VIRKLER: We're much more focused on business to business, and helping businesses lower their costs, and in very few instances are we involved in the verse my return on the municipality side, most of the virtual event manager, we have done has been to help farmers, so they're using that themselves.

REP. ARCONTI (109TH): Okay. And then, so you are, I guess, the question is, are you against the \$10 million dollars CAP, or is it something that you want a different number.

ERIC VIRKLER: I think that it's going to be filled up, as soon as, it's given if that's the amount, and I'm not an expert on how large the queue is, and the dollars involved, I know that there's some people speaking shortly after me, there also, so are kind of members that deal with personal meeting every day I'm building businesses, every day. But, I think, that I'm going to be sitting here in the same exact position, a couple of months from now, when people call, and municipalities call to talk about solar, that we're in right now, it's just, it's going to be, I feel it's going to be for instantly what they could probably speak more intelligently about that.

REP. ARCONTI (109TH): Thanks, Eric.

SENATOR NEEDLEMAN (33RD): Thank you, represented, and thank you Eric, Will, who's up next.

WILL GINN: It's Representative Dubitsky, followed by Amy McLean.

SENATOR NEEDLEMAN (33RD): Good afternoon Representative Dubitsky.

DOUG DUBITSKY: Afternoon, members of the energy and Technology Committee, thank you for letting me testify today on behalf of raised bill6525.

Right now, the energy the electricity distribution market in Connecticut is pretty much a monopoly,

with two major players involved, and a couple of little ones here in there. But, it's basically a monopoly, now sometimes monopolies are good, sometimes they're bad over the years, especially in recent years, there have been several incidents mostly involved in storm reaction that have raised questions, as to whether, or not continuing to have monopolies in the distribution of electricity, and Connecticut is the best way for us to operate, and is in the best interest of the ratepayers of this this state.

I'm not blaming anybody for any problems, that we've had certainly not blaming the thousands of hard-working men and women, who make sure that our electricity is that our houses, when we need it. But I have constituents that are upset, and I'm sure everybody in this state, every Representative and Senator has constituents, who has questions as to why we maintain a monopoly on electricity, and is there a better way. So, raise Bill 6525 essentially, it sets up a task force to look into it, to determine whether, or not it's right to continue having the monopolies, and having the two large corporations run. or our electric distribution system, or whether it's better to inject competition into the system.

I don't know the answer to that if I did, I put in a Bill to implement it, I don't think anybody really knows that's why, I think it's important to me, it's important to have a task force of people to investigate, and to look into whether, or not we should keep it. As it is perhaps that, will be their conclusion, or if we should change it in some way, and I know there are a lot of interest is a lot of moving parts to this. So, I think it's important to have a good group of stakeholders, and a good variety of experiences on this task force to look into the issue should we break up the monopoly, or not.

And so, this this Bill does that I've been asked a lot of questions about well, what about if you break it up what happens to all the assets, the polls, the wires. I don't know, that's going to be one of the tasks of, the task force to look into that, if the task force decides that it is in the best interest of the people of this State to inject competition, they will look into well, what happens to these to the assets. So, that's the bill, I encourage you to support it, and I'd be glad to answer any questions.

SENATOR NEEDLEMAN (33RD): Thank you, Representative Dubitsky. Rep. Arconti.

REP. ARCONTI (109TH): Yes, oh yes, thanks senator, one comment and then, just a quick question, I think you know, when it came, when it comes to the stranded assets, you know, Representative, I don't know this may be something that task force will report on, but I would imagine, it'd be similar to, when we deregulated the utilities back in 20 years ago had, you know, divested their generation assets, you know, eventually the ratepayers ended up paying for those stranded costs, I think, from a \$2 billion dollars over. I don't know, how many years it was, but through, it would be interested to see, what the task force would come up with on that.

And then just a suggestion, I thought of when reading, through it online seven to look back blind, seven through 10 were indicated some of the things the task force would study, and report on. Just a question, if you'd be open to possibly adding a line, or two that, you know, they should also include studying, and reporting on the reliability of the grid, you know, should I transition occur. And how could we, you know, they do recommend breaking up the territory in a certain way?

How do we do it, to make sure there's no disruption in your liability for our constituents?

DOUG DUBITSKY: No, I think that's a great idea actually, you know, I hate to have a report that said, we should break it up without a consideration of the reliability, so I think that would be a very important issue to, or if not the task force for somebody to consider. You know, we certainly don't want to start making Wholesale changes to the way electricity is distributed without considering reliability. So, I would certainly, welcome, adopting that into the task force charge.

REP. ARCONTI (109TH): Great, I appreciate, that all I had Senator, Thank you.

DOUG DUBITSKY: Thank you.

SENATOR NEEDLEMAN (33RD): Thank you Representatives. I'm sorry, yeah well-presented. Ackert has a question.

REP. ACKERT (8TH): Thank you, Mr. Chair, and thank you represent Dubitsky for being here.

My question goes on just looking over the members on it, and you did get a good input just, and maybe something to add, in a few lines, and have you, if you've got it, if you haven't got to take a look, and your thoughts on the makeup of the task force.

I think, you know, possibly some people in the industry, you know, in the past, we were Connecticut light in power, and then we got bought out by, you know, a larger corporation.

So, we're actually worse Lawler in the past, and then we became a large monopoly, so any thoughts on the membership makeup, and you relatively happy with what is on here for the membership makeup.

DOUG DUBITSKY: Well, I had some comments on the membership makeup, that there should be somebody from every source, somebody from united illuminating, and, you know, the originally, I was

proposed that pure do the study, and there be no diverse membership that period, do the whole thing, and I was very concerned about that. Because, you know, frankly, I think, pure has an interest in a certain decision, so, you know I put out a list of diverse people that I thought would probably do a good job.

I'm certainly open to input from your Committee, which deals with these issues, all the time as to who you think would also be a good member on the Committee to investigate these issues. You know, I am I certainly admit, that I am not an expert on a distribution of electricity, so if there is, if there are people that should be on this task force, I'm certainly open to amending the Bill to put them on. And I would encourage the Energy and Technology Committee to suggest people, who would be good to sit on it.

REP. ACKERT (8TH): Well, thank you Representative for your time, and thank you, Mr. Chair.

SENATOR NEEDLEMAN (33RD): Thank you so much, Doug Dubitsky, and thank you to this key.

DOUG DUBITSKY: Will?

WILL GINN: All right, next up is Amy McLeans, and that's going to be followed by Michael Ausere.

AMY MCLEANS SALLS: Everybody, it's really good to see everybody, can you hear me?

SENATOR NEEDLEMAN (33RD): Yes.

AMY MCLEANS SALLS: Okay, great.

SENATOR NEEDLEMAN (33RD): Good to go.

AMY MCLEANS SALLS: Okay, thanks. Well, thank you for allowing me to testify today, and thank you to chairperson Ackert, senator Needleman, and vice

chairs Winfield, and Brendan and ranking members for me, and Ferrero, and all of you Committee members, thank you very much. Again, certainly appreciate this opportunity to send in this testimony in support of SB 882, the APP to climate change mitigation, and home energy affordability, kinetic it's been a catalyst for the advances in clean energy, and climate goals in the region, it was the first State to set greenhouse gas targets for, at the end, the first to create a stakeholder board, of which I am a member, that oversees the energy efficiency improvements in this state, and then it can set a target of reducing greenhouse gas emissions by 45% by 2030, and 80% by 2050, and governor Lamont as executive order prior to this legislation mandates that Connecticut's electricity sector reach zero emissions by 2040.

Although, the Executive Order requires zero emissions for the electric sector by 2040, through the recent energy integrated resources plan DEEP call for legislation, put that target into statute, Acadia Center greys with DEEP that the statute target the statutory target for zero carbon electric grid by 2040, would complement the broader economy, why decarbonization goals laid out, by the global warming solutions act, by passing legislation. The State will ensure that the zero-carbon goal has the force of law, necessary to drive the significant changes in the state's electric sector, that are necessary in order to reach this 2014 goal, and beyond.

We also agree with the part of the Bill that agrees with the provision that allows for the 300,000 megawatts of electricity, which is equivalent to approximately 1% of Connecticut's load for demand response, and energy efficiency measures. These responses these resources will save customers money, and provide stability, and reliability, to the electric grid in the all hours of the day, while increasing the deployment of intermittent resources such as wind and solar, Katie's in our cautions,

that this provision needs to be above, and beyond. However, the efficiency funds that already exist, that are presently being used for the energy energize CTE programs in the state, and I was really glad to hear that, on that was addressed this morning by our Commissioner.

But lastly Acadia Center does support the requirement for property owners listing homes for sale, or lease for that they provide prospective buyers, and tenants with either a home energy label. A number generated during a home energy audit, that summarizes the properties energy efficiency, or the last 12 months of energy bills affordability and efficiency begin with transparency into costs, and opportunities to reduce them.

I thought the conversation this morning was important, and I appreciate it all the dialogue, that you guys, in the questions, you asked to our Commissioner, I think it was a good dialogue, thank you.

SENATOR NEEDLEMAN (33RD): Thank you. I appreciate the testimony. Will, park on this thing.

REP. ARCONTI (109TH): Thanks Amy, thanks for testifying, as always, and forever Committee, I have a question on the 100% percent goal. You know, I keep bringing up the subject of transmission, you know, that, I really don't see US getting to, where we want to be unless, you know, we as a state, and as a region really, as a country kind of get serious, and start putting plans in place to build out our transmission system to make our grid, know to modernize our grid. So, we can, you know, right now, our grid is built for cross generation, it's not built to incorporate the levels of renewables, that you know, we want to see so youth from your perspective from the Acadia Center.

Do these goals and say statue help the grid operators, you know, take more seriously planning

for transmission build out and modernizing the grid to, then help me the state's statutory goals?

AMY MCLEANS SALLS: You know, I think it does, I think, we have to, if we're serious about modernizing the grid, we have to look at a whole plate of different options. Micro grids, for example, need to be employed decentralizing the, you know, the fact that we have all this energy going from one particular place, and not being, it's not sustainable, and I think we really feel like moving forward with putting things into legislation, is going to help us move in that direction. We also, have such great input from the process through the DC-3, we have these pure dockets that have been robustly attended, and people have given incredibly important, and detailed testimony we have some answers here.

We just have to start, I think, putting the will behind it, and I think that's what you all, are trying to do here, and I commend, you for it, and I think we really just have to continue to move forward.

REP. ARCONTI (109TH): Thanks, see you know to meet these goals, do you think from a data centers perspective, I personally, think you know, we need to start working on a regional solution for millstone. One, just the capacity market reforms in general, but also nope come 2029 regional solution for millstone to keep that resource online, because not only does it benefit Connecticut, it benefits the region. Yes, I guess that is the case, that are have a position, or.

AMY MCLEANS SALLS: Maybe we had a position on, it back when we were talking about millstone two sessions ago, as well, my colleague Emily was have worked with a Representative for me, can others a lot of this stuff. Yes, I think we have to, and I think the, ISO question is a huge one, and that was talked about this morning, regional solutions, is



what we have to do it's only fair to Connecticut, and we were going to need to start making these solutions, putting all the pieces together to address them, so yes.

REP. ARCONTI (109TH): Agree, thanks.

AMY MCLEANS SALLS: That's it for me. Thank you.

SENATOR NEEDLEMAN (33RD): Thank you for coming, Amy. And thank you so much for testifying.

AMY MCLEANS SALLS: Thank you.

SENATOR NEEDLEMAN (33RD): Will?

WILL GINN: Up next, we have Ms. Shubhada followed by Michael Ausere, and Mark Kimball.

SHUBHADA KAMBLI: Great. Thank you, Co-Chairs, Senator Needleman. Can you hear me? Okay, great. Thank you, Vice Chairs Winfield, Allie-Brennan, Ranking Members Formica and Ferrero, and Members of the Energy and Technology Committee. Thank you for the opportunity to provide testimony for SB882.

My name is Shubhada Kampli, and I'm Sustainability Director for the City of Hartford. We strongly support sections, three and four, this bill, which would provide improved consumer protections for every renter, and homebuyer in the state these sections, which prioritize energy data transparency, or a basic step to inform people, who are in the market for a new home. Our office has been looking into consumer protections like this, since 2019 with the applicant variety of State, regional and national organizations one analysis that was provided to us, which was completed by northeast energy efficiency partnerships indicates that New York state, for example, has had a utility Bill transparency law, in place since the 1980s.

Through our work with those national rental efficiency standards learning groups, and organizations that maintain National Energy performance standards, we know that the measures like this are essential for equity, particularly as it relates to renters with very high energy burdens. The proposed Bill has the support of advocates across Connecticut for good reason, according to a 2017, report by Operation Fuel hurts most vulnerable households, can have utility bills that are over a third of their household income.

Looking at data from other communities, we're unfortunately not alone in this, that's a crushing energy burden, that not every consumer expects, when they sign a lease, or mortgage provisions in the bill, that support mentors are particularly welcome, given that the majority apartment's residents are tenants, not homeowners. We are also in favor of minimizing, where possible any administrative costs associated with these requirements and communicating energy data, in a way that simply notes factors, such as occupancy levels, or technology use, that can affect energy consumption from household to household.

Given the connections among high utility bills, utility shut off eviction's foreclosures, and homelessness. This Bill represents a very basic first step towards consumer awareness, and early intervention in the cycle, resident should be able to choose their homes, based on a variety of factors, including energy efficiency, as pandemic related moratoria that protect residents from utilities shut off, and rental eviction may soon expire.

It is critical, that we take immediate, and quick action to protect our residents, where we can, this is just one of many steps on residential energy efficiency, that we can and must take, we urge your quick action to support this bill, thank you.

SENATOR NEEDLEMAN (33RD): Thank you sure, what obviously this is a great idea, and it's very important that we do something for people, who are very vulnerable to not looking at some of this information, or not even being able to find it. You said that New York's done it since the 1980s, and then you also mentioned, that we're all invested and trying to figure out a way to do this without sort of creating a bureaucratic, nightmare a lot of apartments are owned by small business people, we want to make sure that we can provide information that's meaningful, and relevant, I haven't figured out how to get out the variability of how warm, or how cool you want your property.

You know, tends to be electric is the big culprit, if you have electric key, I would think would be the largest problem, I don't know, where other problems are, you know, in a multi-family building, generally, heat is supplied, I think, then that separately metered, unless individual units have their own boilers, but I think that the problem comes from people that have electric resistance. Is that right?

SHUBHADA KAMBLI: I unfortunately don't know the data related to, you know, the answer to that question, but I can certainly look into it, and find out.

SENATOR NEEDLEMAN (33RD): I'd be very interested, to me the devils in the details here, we don't want anybody surprised, and it's slightly different, when you're buying a property. Because, I do believe the disclosure on a purchase, and sale agreement, you know that when you sign up to list your house, it does say what kind of heat, you have, and a home inspection will show if it's a 70-year-old, what boiler versus a 20-year-old boiler. But the electric resistance heat is like the huge costs for three months a year, I don't know if there's any other aspect of renting that says problematic as the heat, so maybe there's a way. This isn't the

governor's will be negotiating us to figure out, a way to do something that helps the potential tenants, or even the potential Myers, without creating a bureaucratic nightmare, and any input, you have this appreciated.

SHUBHADA KAMBLI: Thank you.

SENATOR NEEDLEMAN (33RD): I don't see anybody having any questions. So, Will, who's up next?

WILL GINN: Up next, we have Michael Ausere, along with Mark Kimball, followed by Matthew Knickerbocker.

MICHAEL AUSERE: Good afternoon, everyone can you hear me? Okay, Will, good afternoon Chairman, Needleman chairman, or kind of to Representative Arora, Senator Formica, Representative for our, and other distinguished members of the Committee.

My name is Michael Ausere, I'm the Vice President of Business Development at Every Source. And thanks for providing me the opportunity today, to appear before you. I'm accompanied by my colleague mark Campbell, who's project director for the utility own solar, that we currently have developed in Massachusetts, and he'll help me an answer any questions you might have.

I'm here today to testify solely on Senate Bill 952, and that concerning certain solar energy projects, I'll briefly summarize Eversource's comments on the bill, and defer to my written testimony for the details. I want to thank the Committee for submitting this Bill for discussion at today's public hearing, it advances Connecticut's carbon reduction goals, by providing deep impure up with the authority, to elect to approve up 250 megawatts of utility own grid scale solar, if they concluded it, serves the long-term interest of the ratepayers.

The Bill benefits the public by requiring at least 50% of the projects, be located in towns that are within an alliance school district, and then ensures that the associated property tax revenues will benefit these primarily urban areas, and towns thereby. Also limiting the amount of solar projects being developed and Connecticut's, disappearing farmlands the Bill will benefit the public by spring economic development through job creation, and every source would use Union electricians for the proposed work.

Also, pure as close oversight over the two electric distribution companies, will help ensure that the customers are that our customers benefit, from cost effective projects. These costs are fully visible, and us to gauge the competitiveness of future renewable energy sources, from our experience, these projects would enjoy economies of scale achievable. Through large scale renewable development, those economies of scale, coupled with Eversources strong project management track, record enabled it to complete solar projects. In Massachusetts at costs, there were 20% below the level that was approved by the Massachusetts department of public utilities. The Bill further protects customer interest, by explaining that electric distribution companies can over cover those costs, that PURA determines were prudently incurred.

Finally, the build is not a do electric deregulation, because all the benefits of these projects, or float all customers through a non-excel component electric bill, including those customers, who purchase their electricity from competitive retail suppliers, this approach is consistent with the treatment of other State approved renewable generation projects. For all these reasons, we support this bill, and that concludes my testimony, I'd be happy to answer our market, I'd be happy to answer any questions, you may have that Senate Bill 952.

And one last comment, is that Mr. Pace from EverSource, and who will follow me, will testify that Eversources position, and all the other bills on the agenda for today's here, thank you.

SENATOR NEEDLEMAN (33RD): Thank you so much Michael, I'm sure, you don't want to talk about wind energy. You had enough?

MICHAEL AUSERE: No, never. No.

SENATOR NEEDLEMAN (33RD): So, this is something, obviously, that would be a very big step for us, and I would imagine that everybody in the solar industry is wondering. Are you going to use third party companies to do this work, or do you plan on becoming a major solar provider in your own right?

MICHAEL AUSERE: Now what we would kind of, I'm sorry, was it yes?

SENATOR NEEDLEMAN (33RD): that's a question.

MICHAEL AUSERE: Yes, you know, we would take the same approach, that we took in Massachusetts, and give you a little bit background Eversource, has developed over time utility own solar Massachusetts 22 sites. And it totally they amount to 70 megawatts, and in all those projects, we subcontracted to various contractors, and suppliers that are out there. So, in the case Massachusetts, we expected, it would play out in Connecticut as well, as soon as this legislation was passed, we added jobs for the solar industry.

SENATOR NEEDLEMAN (33RD): Great, do you have any issues with that being sort of mandated in the bill.

MICHAEL AUSERE: I can't think of any.

SENATOR NEEDLEMAN (33RD): Okay, and roughly the most recent projects, that you've done. You're selling the electricity to the grid, I'm assuming,

or do you use it, as your own backup, or storage, how are you using that energy?

MICHAEL AUSERE: So again, and using them Massachusetts as the analogy is the way this legislation is proposing to work as well, he likes to distribution companies will own the solar generation facilities, and they will sell the output into the wholesale market and customers, the customers will be credited for the value of that revenue.

SENATOR NEEDLEMAN (33RD): And you're selling it at the market rate, or are you looking to take advantage of any other subsidies, or?

MICHAEL AUSERE: We would we sell it at the market rate.

SENATOR NEEDLEMAN (33RD): Okay well, you know, I, there are pluses and minuses to this obviously, we're entertaining a conversation on it, and I appreciate your coming to testify. Rep. Arconti.

REP. ARCONTI (109TH): Yeah, thanks Senator. Did you speak to the DEEP's testimony earlier today, when they reference the authorization testimony of Bob, and public back at when they experimented, through that public ACT with some utility on solar ownership, and then the price comparison versus, when it was been out competitively?

MICHAEL AUSERE: Sure, I heard Mr. Dykes make that comment, I wasn't personally involved in that, are from what, or comments, what she said, it was apparently through a competitive procurement process in 2011. So, it was over 10years ago, prices are in the cost of solar equipment's, come down quite a bit. But, at the end of day, we have not built utility own solar, and Connecticut are, as I was coming in earlier, our experience so far has been Massachusetts, we'd like to bring that to Connecticut. But, the only generation, we are solar

generation, we currently own is in Massachusetts, and it's the approach, there is very similar to what is proposes let's license utility out.

And one thing, I would point out there, is that one of the factors that led to the method, the Massachusetts department of public utilities approving those projects for that. These projects were posing, there were actually very competitive relative to the current cost, and incentives associated with solar in Massachusetts at that time, and ultimately, when we did build the projects became, it significantly lower the budget.

REP. ARCONTI (109TH): Thanks, nothing's been answered, and would you guys still be willing to do this, if it isn't rate base, but rather recovered through the reconciling adjustments.

MICHAEL AUSERE: Well, I'm not an expert, I rainmaking, but I believe that if it goes through, it did, if we talked about reconciling rate mechanism, that is a rate-based approach to the -- to the ownership of the solar. Maybe, I can just make touch on the benefits, that we've seen out of, you took a risk-based approach to ownership number, one is well number, one is under this legislation, this is, you know, you see this typically, and rate-based approach is that, we would for, we undertook the program. We would go too deep and effectively make a filing with deep, were deep within opine on whether, or not, the proposal serves a long-term interest rate payer, that's an important step, because if assuming deeper include, no, yes, is getting there, whether, or not, we move forward, not then once.

We construct the projects, we would then go to pure up, and see cost recovery, and to do that, we'd have to demonstrate the classroom, or approval incurred. So, to do that, it would be completely notebook process, you would see PURA, with see to competitive procurement process, we undertook that I touched on



earlier and all the costs we've incurred, and assess which costs were prudently incurred versus not, we don't recover those never really anchor. And then, now, ultimately, to the extent cost of printing incurred, and approved by DEEP fried they would make it to the customers' bills to a record reconciling right mechanism.

REP. ARCONTI (109TH): Right, I thought you build something into a rate base against the rate of return, that is the same.

MICHAEL AUSERE: No, you know, to the extent, but I have another source colleague, you know, you're watching me right now, so to the extent, I misspeak will follow me with correction but. So, let me, let me add on to that you're a process, so pure with PURA would approve all the costs incurred by the solar panels, the inverse all the equipment. But also, they would review our proposed rate of return that we were earning on the investment, so pure would have, as I say, in that, as well. All those ingredients go into what ultimately gets put on the customer bill.

REP. ARCONTI (109TH): Okay. And then, I lost my train of thought, I'm going to go to Senator Formica, he has his hand raised, and if I can get it back on, my question Senator Formica.

SENATOR FORMICA (20TH): Thank you Mr. Chairman, Michael how are you today?

MICHAEL AUSERE: I'm very well, Sir it's good to see you.

SENATOR FORMICA (20TH): Thank you, Sir, always YouTube as well, I have one request, and this request another source, that each of the last five meetings, that I've had your comment about selling taking the energy generated from the year solar, available generation, and selling it on the market. You know, I have some concerns about that, because,

back in the fall on them, during the late summer, when the millstone was blamed for, the high rate increase proposed, by your company.

And the explanation, I got was that well, we get the energy, and we have to sell it at market rate, we paid 4.9 cents, and you sold it for the mid twos, there's been adequate opportunities to sell. That power in the mid-six months, and book the prophet of the ratepayers instead of book in the loss, so what I've been asking for is, what is the process, who decides the timing? And if we allow another opportunity for generation, or company to buy on a spot on, so, on the spot market, what protection to the consumers have that you're going to do that, in a way that benefits them first, and perhaps not the balance sheet, or a profit loss situation that you might have?

So, you may be the one to answer this, you may not, you may ask, whoever, but I've been asking this question, and would love to have that process cleared out to, that I understand it.

MICHAEL AUSERE: I let me follow up on that, I get, we have a group of folks that are responsible for selling, well actually both buying and selling our power and in the case of with so obviously that, the mass they're responsible for selling it, and I can follow up with them, and I was not aware, you've made this request before. But I can follow up with that we can get back with an overview for you, but I can assure you that, at least what I've been close to the other solar facilities, they are focused on getting the highest amount of revenue possible for the customers.

SENATOR FORMICA (20TH): You know, the base load that the minion providers at 4.9, I believe offshore wind is going to be in the eight cent range, based on previous procurements cold broken, which is unsure has been paying, I believe their 20 year power purchase agreement, is north of 11 cents. So,

I just be concerned on all of these power purchase agreements play, together, and how people are playing the market, and I understand its big money, and there's money to be made on dealing in money and markets. But I also don't want the ratepayers to be the one that are taking the last one, either bad decisions are arbitrary decisions are made by people, are selling and buying those things, so thank you very much.

MICHAEL AUSERE: Thank you.

SENATOR FORMICA (20TH): Thank you, Mr. Chairman.

SENATOR NEEDLEMAN (33RD): Thank you Senator Formica, who's up next Will?

WILL GINN: Up next, we have first Matthew Knickerbocker, followed by Jennifer from FuelCell Energy.

MATTHEW KNICKERBOCKER: Right. Thank you very much, senator Needleman, Representative Arconti, and Honorable Members of the Committee. Thank you so much for the opportunities appear before you again.

I'm speaking today in strong supportive, SB 937, and I'd like to note, that I've submitted testimony on behalf of the town of Bethel. And I'm also speaking on behalf of Council of small towns, and CCM in our support of this this bill, as well, many of you will remember, I've testified many times about battles experience with our electrical distributor following tropical storm is, it was not a happy experience. And I think we can all agree that deregulation and the energy markets was intended to unleash the power of the free market, to lower costs and provide better service.

Unfortunately, didn't exactly work out, that way what it also did, was it put the electrical business it back in the hands of the big casino, we call Wall Street. And it entices suppliers to behave the way

any other corporation does, which is to maximize shareholder value by minimizing costs, and that has led to a tremendous problem in dealing with storm recovery, and the lack of resilience lack of investment, and the resilience of our system. Obviously, the way to fix, that is to put incentives in place, put regulations in place, that make, that happen, when I look at SB 937, what I see it, along with the very wisely past take back our grid ACT from earlier this year, or last year, I should say.

There are systems of economic incentives; you might even call them disincentives that will entice the suppliers to invest in that resiliency, in order to protect their own financial interests. I think this is a wise move, and I support this Bill very strongly. Now, while I'm at it, while I have your ear, and I'm going to just be, I want to be very careful to point out, I'm testifying only, after myself and the town of Bethel and this one. I also want to add my strong support for SB 950, and I will tell you, I think, I might be the lone guy in the woods in favor of this, but I believe very strongly that, if we are going to hold every source, and the other distributors accountable for the resiliency of their system, and put produce financial penalties for not hardening the system.

Then, I think we have to take the gloves off, and allow them to protect the infrastructure, by trimming dead trees within the protected zones, that they control, I think that's an important part of responsibility going both ways. So, just wanted to cover those comments, along with my written testimony, that I submitted this morning and I'll pause here, and see if we have any questions, that I can answer.

SENATOR NEEDLEMAN (33RD): Thank you so much Mat. I appreciate the testimony. I got to know you well under very stressful circumstances during that storm. And I agree with you. The, the tree trimming Bill that we put in, although it needs some language

changes, and it really does, it was never meant to cut out tree wardens or any of that. It was just an attempt to take certain circuits that are named backbone theater circuits that each of which would take out 1000 homes or 500 homes and give the utility a little bit less cumbersome offer process but still not allow them to unilaterally make decisions.

I think, working with tree wardens and first selectman decisions may have to be made at least don't require every tree to be possibly brought to pure because, as you say it's impossible. I drive around my town and I know which trees are problematic and which ones, if they fall are going to take down half the town and we need to have some more flexibility, it cannot be a unilateral process, because the utilities, have demonstrated in the past that when they have unilateral authority, they can ride roughshod over municipalities and individuals and we can't let that happen, but we also need to make sure that they have some latitude in every tree doesn't require a three month process because, as you know, if they come sit with the tree warden and say we're going to do this neighborhood.

And one person says, I don't want this tree touch then that one person can stop that work, not all the work, but that one tree will not be taken out because they're going to come and they're going to do the other work. And then they might not come back until after that tree falls down. So, I appreciate as another long serving first selectman your perspective on it was good getting to know you and I'm glad that you appreciate what we were able to do in a bipartisan, broad based way with take back our grid. There's so much good that's yet to come out of that Bill.

Things like you heard Chairman Gillett talking about, you know, low-income rates and economic development rates and more accountability and more transparency and some additional tools that allow

her legitimately to say, these are not recoverable costs. All that over time is going to be good for the state of Connecticut and so I'm looking to see if anybody else has any questions for first selectman Knickerbocker. They're the -- there being none. Thank you so much for coming today, Matt.

MATTHEW KNICKERBOCKER: Thank you very much. Keep up the good work.

SENATOR NEEDLEMAN (33RD): Thank you, well.

WILL GINN: Next up we have Jennifer from Fuel Cell Energy, followed by Representative Arconti.

JENNIFER ARASIMOWICZ: Good afternoon. Thank you, Representative Arconti, Senator Needleman and all of the Members of the Committee for the opportunity to provide comments here today. My name is Jennifer Arasimowicz, still differently, but pronounced the same and I'm the general counsel and Chief Administrative Officer of Fuel Cell Energy. Fuel Cells just entered our 52nd year of operation. All 52 of them, probably headquartered in and exporting our products globally from right here in Connecticut. And I'm here to speak to about two items on today's agenda; House Bill 6524 and Senate Bill 882.

Fuel Cell has submitted written comments on these two Bills, so I'm only going to highlight some key points now in order to conserve; excuse me, conserve time for any questions. Fuel Cells certainly supportive of HB 6524 and we thank the Committee for its continued and unwavering support of Connecticut's Fuel Cell Industry. We do this Bill as delivering on the promise contained in public acts 17-144 for the procurement of Fuel Cells, which to date has unfortunately never been implemented. Fuel Cell is opposed to Senate Bill 882 and specifically the provisions about the non-carbon emitting electric generation, which seems to come back, year after year, in one form or another, and which, in

our opinion, represents misguided policy detrimental to both residents and businesses. SB 882 ensures that Connecticut is not going to have a place in the clean energy transition to a hydrogen economy.

The current administration does seem focused on electrification using wind, solar and batteries is the answer to the climate challenge while the rest of the world is moving in the direction of hydrogen generation, hydrogen storage and Fuel Cells. I note that Commissioner mentioned clean hydrogen this morning; however, in over 170 pages of the draft integrated resource plan, the word hydrogen only appears twice. An outright ban on carbon emitting resources, both behind the meter and grid connected, absent of viable transition and clear path to resilient base load electricity like that provided by hydrogen, FuelCell ensures that Connecticut is going to be sitting in the dark, while its industry moves out.

Wind, solar and batteries well, very important to the overall clean energy mix can't carry it alone. Frankly, science dictates that it's impossible to power Connecticut without clean base load non-intermittent generation. We have included a presentation, with our written comments that demonstrates that it would take 700 square miles of land costs \$13 Billion dollars for battery storage and consumed 6% of the world's global cobalt production to power Connecticut the solar and storage and that would not provide the resiliency or reliability of Fuel Cells, given the need, as Representative our country is noted several times today for a robust transmission infrastructure, which is still susceptible to outage. Large scale, wind and solar is unable to site power where it's consumed in the middle of our urban communities like can be done with clean fuel cells.

SENATOR WINFIELD (10TH): 30 seconds.

JENNIFER ARASIMOWICZ: The cleanest base load distributed generation available today are Fuel Cells. We keep the lights on, when other forms of generation go down. We are capable of transitioning seamlessly to Biogas, should there ever be enough produced in Connecticut, which we hope there will be someday and we can also produce hydrogen. We can also capture carbon dioxide from fossil plants and industrial emitters and separated. But not SB 882 is passed. We need continued investment in our products have today in order to achieve our products tomorrow. I'm happy to answer questions from Members of the Committee, I request that you consider our more expansive comments in your deliberations and thank you again for your support.

SENATOR NEEDLEMAN (33RD): Thank you Jennifer. Representative Arconti.

REP. ARCONTI (109TH): Thank Senator. Thanks, Jennifer, for, for testifying today, did you speak to, I'll start with house, the House Bill. Would you be able to speak to the resiliency and economic impacts that the state would benefit from, if the House Bill were to become statute?

JENNIFER ARASIMOWICZ: Certainly, I'll start with resiliency. We approach the utilities when 17144 was passed and actually posited a resiliency of play with Fuel Cells, which would be citing them at wastewater treatment plants. Because they didn't avail themselves of the Bill, no Fuel Cells were installed at wastewater treatment plants. During hurricane multiple wastewater treatment plants lost power. That would not have lost power if they had had on site Fuel Cells and there were several instances of raw sewage being dumped into Connecticut rivers and streams, so the ability to have a thoughtful cooperatively planned targeted opportunity to place Fuel Cells in critical places, hospitals, wastewater treatment plants, things of that nature and connect them in micro grid mode



would provide the type of resiliency we need when these types of storms come along.

With respect to the economic benefits, you know we've, we've been here many times and testified where a Connecticut based company, there are three stationary Fuel Cell companies in the world, two of them are located here in Connecticut and there's plenty of evidence done by CCAT and others that for every megawatt of Fuel Cells acquired, North of \$800,000 dollars in tax revenues provided to state and municipalities and eight jobs are created, right here in the state of Connecticut. You know I'm proud to say we've been paying well an excess of \$15 dollars an hour to our factory floor employees before it was, before it was the cool thing to do, these are really, really good jobs and does a lot for the Connecticut economy, in addition to just the resiliency benefits.

REP. ARCONTI (109TH): Thanks for that. I think it was important point to highlight on, I'm glad you brought up the wastewater treatment plant scenario, because you know that's something I know me, my co-chair, Ranking Members think about costly and is how do our decisions affect the reliability and resiliency of the grid, and I think Fuel Cells have a big role to play in making our grid more resilient. You know, as we see the effects of climate change over the next, you know decade or two. And then my follow up question to is, if you could expand where the industry is going, you know I love, how you know discussing hydrogen and the ability to even go through continued R&D carbon capture technology.

JENNIFER ARASIMOWICZ: Absolutely um. The product is advanced. I mean we've been here 52 years, so obviously we've had substantial advancements. You know, first and foremost, we have the ability to combined heat and power. So, for other manufacturers that can't rely on intermittent power, we can displace their boilers, we're doing that at Pfizer

where they basically invented the vaccine powered by FuelCell Energy, providing them electricity, displacing the need to run gas with their boilers to provide additional heat. We are currently installing a breakthrough project at the port of Long Beach in California, which is going to run on biogas because California is done a lot with digesters, they have a lot of biogas.

It's going to provide electricity and thermal energy at the port facility, it's going to generate hydrogen to fuel the Toyota Mirai cars and class eight trucks at the port and then the other byproduct of a fuel cell is hot water, which is going to be used by Toyota for its car washing operations. So, the generation of hydrogen and California has invested substantially in hydrogen networks for vehicle fueling is something that Connecticut could look to utilizing fuel cells. Now hydrogen the traditional way of producing it today is actually quite dirty, it's something called steam methane reforming. It's almost as dirty as burning coal. But when you generate hydrogen with a fuel cell, it's incredibly clean, no knocks, no socks, no particulates. And then, our carbon capture application, we have the ability to cite a fuel cell next to a coal burning plan or a gas burning plan and take the flu gas from their operations run it through our fresh air intake and concentrate the carbon. We also, quite frankly, have the ability to concentrate our own carbon in the process, the problem is, what do you do with it. We're looking at advanced applications such as giving it to beverage manufacturers to carbonate beverage or for production of dry ice.

But again, it's the ability to sell our products today, which funds and perpetuates the business and the ability to do some of these, these cool things for the future, which we hope will be here by 2040. But if Connecticut passes SB 882 that says there's no more natural gas and even looking at 6524 those of them stranded assets. If the biogas doesn't

develop two switches over to if, if hydrogen doesn't develop and quite frankly, investors aren't going to fund that. If they know that there's a cliff and they don't see a very defined viable path to move forward.

REP. ARCONTI (109TH): Right, so how would you bring about it? Your commentary sparked another question, I know a lot of these are done through 20 year, PP units, you know let's say fuel cell, you know entered into a PPA lane in 2025 for some procurement in Connecticut and section one of SB 882 was in statue at that point as, as we end. You know what would happen, you know the PPA would go pass the goal that the statue says of 2040, so what would happen, you know December 31, 2039 to these assets and what would the company didn't mean. It's a, it's a power purchase agreement, so I don't know, maybe shell some light on that.

JENNIFER ARASIMOWICZ: I wish I could what I would tell you is first of all that key pay would probably never get executed because wouldn't be able to finance it, because the bank sitting across the table from us would ask the exact same question that you asked and they would have to ensure that they could fully recover their investment prior to the time that that plant would presumably have to be shut down. I don't know because when you read SB 882 it's very unclear, as to what happens, it's unclear what happens, right now, you have hospitals, whether they have fuel cells or they have backup diesel generation. What happens on December 31, 2039 when this Bill goes into effect our hospitals, no longer able to fire up their diesel generators to keep the lights on, in a storm. So, you know the utilities had fuel cells that had to shut down as a result of this, if the utilities had procured the assets, I assume, they would become stranded assets, but the lawyer and me, reading the Bill says, I have no idea what happens.

REP. ARCONTI (109TH): Needed asset from a utility perspective with the ratepayers beyond the hook for that stranded assets.

JENNIFER ARASIMOWICZ: They always have been in the past for stranded costs.

REP. ARCONTI (109TH): Alright, that concludes my questions. Thanks so much Jen for testifying thanks Mr. Chairman.

JENNIFER ARASIMOWICZ: Thank you, Representative Arconti.

SENATOR NEEDLEMAN (33RD): Thank you, Representative Arconti, Representative Arora.

REP. ARORA (151TH): Thank you, thank you, Mr. Chair and thank you for the excellent testimony, for your excellent testimony. I, I have a question here, or maybe a clarifying, clarification of Arasimowicz. Pardon, pardon me there.

JENNIFER ARASIMOWICZ: It's fine.

REP. ARORA (151ST): You know, and my question really is it your clarification is that the fuel cell, which you build, which produce electricity are fueled by hydrogen. Right and hydrogen and option, but hydrogen being the tougher thing to get in some sense because it's, it's just that you said that the conventional 90% of the hydrogen produced is very dirty and the other 10% right now to the electrochemical processes or what they call electro, electrolysis is quite clean very clean.

But my question for you is that this clean hydrogen is very inefficient, that is, whatever electricity you produce it takes more than that, as a matter of fact, I've been told it's takes 30 or 40% more than that to produce the hydrogen, so you know, so in some sense, I just want your advice and your, your, your, your thoughts on why, how does it become

viable on any scale when you are putting in more electricity to produce back 30% less electricity albeit clean one, but you started with 100 units and then you convert it into hydrogen and then you convert it back to using a fuel cell into electricity and you got only 70% back. That's the technology, as I understand it, can you please comment and explain to the comedian do perhaps to myself about it.

JENNIFER ARASIMOWICZ: Certainly, and I'm going to caveat this by saying, I am a lawyer by training not an engineer so bear with me. First of all, we have two products at Fuel Cell Energy, one of them is currently commercial, one of them is not. Our commercial product is a carbon-based product; it does not run-on straight hydrogen, it takes methane rich fuel like natural gas, like biogas, like propane and through chemical reaction internal to the fuel cell, strips out the hydrogen that it actually uses to generate the electricity. We do have under development a solid oxide product, which does have the capability to run on hydrogen, and the reason we are using that other product for a lot of our hydrogen basis, because we can do reverse electrolysis. So, we can create our own hydrogen and we can store it.

So, what you can do in that case and if you look at somewhere like California, where they have an overabundance of solar power, they actually have to have to curtail solar during the day, because they have so much. If you put a bunch of our solid oxide electrolysis fuel cells, you could take all that extra sun power, which would normally not be produced, because it would be curtailed. Use that to create hydrogen, put the hydrogen in the tank, you actually have unlimited storage, unlike batteries were typically you get 4 or 5 or 6 hours. As long as you keep adding tanks, you keep storing all the hydrogen you want. And then at night when the sun goes down you reverse the process and you take that

hydrogen, you put it back through the fuel cell to generate electricity.

So, as a company that's how we're looking at it. We're looking at the reverse electrolysis as, taking what otherwise would be wasted electricity curtailment from sun or wind power that has to be shut off because there isn't demand on the grid using it during those times to generate the hydrogen store it. And then utilize that at times when the grid is in need of power, but again that's not, that's not commercial yet, but we're hoping to get there, but we've got to you know sell the product, we have today to get there.

REP. ARORA (151ST): I understand, no, thank you very much, I, that really helps. I do understand that the current methane-based process, obviously has carbon emissions with it, but the new process, which that you're going through will be, will not have it and that's I congratulate you for that and, and commend you for that. Thank you. I think the question, which really, I want us, all to be clear is that the real fuel cells are real competition and alternate and a good alternate, viable alternate two batteries, they are not to electric generation.

Right or to really to solar, because in some sense in solar, we start with the energy source, being the sun or in the case of wind, or in the case of fossil fuels. With fossil fuel we create energy. In this case, we in some sense start electricity convert into hydrogen, convert it back into energy, so they're really good competition and alternate two batteries, which obviously just as you pointed out in a higher renewable environment, we will use, so will need a lot as California does. So, the question really which we, we need to consider and perhaps that's my last question and you can, you can, please give your comments on it.

How does the economics, as well as the, as well, of the fuel cell compare with the conventional

batteries, so because batteries are coming up, you know they used to be really, really expensive only two or three years ago now, with all the test, you know Tesla and all, many other manufacturers, the batteries have become more viable, so as to say so, could you please comment as to are they equal in terms of capital investment versus price are they better, you know how do you compare the technology, you know for batteries versus fuel cells as storing energy.

JENNIFER ARASIMOWICZ: For, appreciate the question. It's an excellent question and look, will readily admit that for short term storage batteries are more economical, I mean the simple fact is, if you're looking to bridge a two hour outage or three hour outage, it's far more economical to do it with battery storage than it is with a fuel cell. However, batteries are very limited in the amount that they can store and, if you look at the storms that we've had, even look at just the wind storm, the other night, where we had people out of power for 12, 13, or 14 hours. You know, you don't have a way to recharge that battery and you're going to run out of power, whereas again with a fuel cell you, you can literally provide power for days, if not weeks, if not months, so we view the technologies as complimentary although you know one thing that at some point, I think this Committee or the Environment Committee is going to have to address is, is the manufacturing and disposal of batteries because they're, they're not manufactured in a very sustainable way and certainly there, there are disposed of in landfills, you know I'm proud to say that Fuel Cell Energy recycling and reusing 93% by weight of all of our fuel cells, you will not find a fuel cell graveyard anywhere.

So, you know in in the move to, you know battery storage and even solar panels and wind turbines, thousands 10s of thousands of metric tons of carbon fiber blades buried in the Utah Desert. At some point we have to, you know address the full

lifecycle environmental sustainability of products, and I think if you compare whether it's batteries, wind turbines, or solar panels to fuel cells. Looking at that whole life cycle, I think you'll find it, we are quite comparable, if not better.

REP. ARORA (151ST): On cost can you comment as well, between batteries, as well as where you are in the current cycle, in the current development, I know you're a sunrise industry, in that sense, but you, can you comment on the cost or you.

JENNIFER ARASIMOWICZ: Yeah. Well, as I mentioned on a battery basis, you know for short duration storage, we would be too expensive, we are more expensive than batteries, but if you're looking for a long duration storage you can't get it from batteries so, you know, to put a price on that, the products not commercially yet and you're a publicly traded, so I apologize, I can't give you a number, because it would be a Reg FD violation, um, but you know for short duration storage batteries are certainly less expensive.

REP. ARORA (151ST): Thank you so much, I do really want to point out to the Committee that it's a very good strategic choice for us to have some fuel cell storage and I want to call it, storage, because, because, sometimes it gets lost, as if it's a generation type. It's more of a storage process, but I think I agree 100%, you know I'm an engineer, you know, so I do agree 100% that you know, there should be thought in terms of strategic standpoint that we have longer term storage, which can only come from fuel cells, now there is obviously batteries are, you know contending and getting better, so you got, you got you all have a good, good competition and as we like competition, and we also like choice, so thank you for, for leading this industry, especially from our state, and thank you, Mr. Chair, for the time.



JENNIFER ARASIMOWICZ: Thank you, Representative Arora.

SENATOR NEEDLEMAN (33RD): And I think that no one else has to hand up. Thank you so much again, always an education Jennifer, thank you for coming today.

JENNIFER ARASIMOWICZ: Thank you, Senator Needleman. Thank you.

WILL GINN: Next, we have Representative Lanoue followed by Jamie Smith.

BRIAN LANOUE: Good, Good afternoon, Mr. Chairman, Members of the Energy and Technology Committee, so nice to see everybody again for the record. I'm Brian Lanoue, state Representative from the 45th house district comprising five rural communities down in Eastern Connecticut and I'm here today to speak in support of HB 6525, and this is an Act establishing a task force to study electric distribution companies. I represent thousands and thousands of constituents that consists of hard-working families, small business owners trying to survive and stay afloat, as well as many, many senior citizens on fixed incomes. The year 2020 as we're all aware, has been a very trying complicated and burdensome year on all of us.

As a result of COVID-19 and the quarantines, there's been significant unemployment in my district in front of state, leaving too many economic hardships. That paired with the some of the highest energy rates in the country here in Connecticut and, on top of that, the summer, while we've experienced another rate hike from Eversource on, leading to additional hiking energy. Thankfully that's been rolled back, at least for now. In addition to that, after they, this rate hike came into effect, the results we got from that was essentially two weeks, and for many places in my district of power outages, after the tropical storm came through our area. Restoration can happen for up to two weeks in many areas. As a

free market legislator, I think the time has come, where we need to look at more options that are available to us into our that's more fair and more equitable to our repairs.

We need to get this task force going, we need to charge them to study the different options and to get back to us, so we can explore very aggressively potential diversifying the electric distribution and in our, in our state. I particular would like to see language in here to specifically charge the task force to look at a municipal electric companies specifically, specifically to look at the option of and the feasibility of them to be able to expand their surface area and what the cost would be for the infrastructure associated with that potential expansion. Thank you very much for the opportunity to testify and I'll be happy to take any questions.

SENATOR NEEDLEMAN (33RD): Thank you, Representative Lanoue. Nice to see you, as always, I don't see anybody with their hand raised so thanks so much.

BRIAN LANOUE: Thanks, Mr. Chairman, and just to let you know, I will be forwarding my written testimony on this evening.

SENATOR NEEDLEMAN (33RD): Great. Thank you.

BRIAN LANOUE: Thank you so much.

WILL GINN: Next up, we have Jamie Smith followed by Kevin Moynihan.

JAIME SMITH: Good afternoon, thank you for the opportunity to speak to you Senator Needleman, Representative Arconti, Distinguished Members of the Energy Technology. My name is Jamie Smith, I'm one of the owners of lodestar energy. We're Connecticut based solar developer. We've been developing and building projects for seven years. We've been involved in the virtual net metering program since its inception, as participants back even in 2014 is

a working group. We're supporting SB 952 with some changes. We are requesting a significant expansion of the virtual amateur program by either an uncapping it for two years to follow the federal ITC expansion extension or adding at least \$30 million dollars, which would clear the queue and provide \$10 million dollars to the alliance school districts. There are three reasons why we believe you should support this.

The first is jobs and jobs in Connecticut, we haven't heard a lot this morning, this afternoon about jobs, but our projects provide electrical jobs, construction engineering, legal accounting, operations and maintenance and increase in the CAP to \$50 million dollars would create approximately 1000 jobs that's according to the NRL models, those are jobs from both construction and maintenance. A typical project that we build has about \$900,000 dollars in electrical work. So why am I, you know focused on local jobs, I live in Connecticut, I really frustrated when we, we go take the large scale, wind and solar and take it out of the state, I think that's a real loss for us, I support it, I think we need all forms of energy, large and small, but don't love that as a Connecticut resident.

The second reason are the savings and benefits for the municipality. Senator Needleman talked about this a little bit earlier. There are only 26 municipalities that are currently participating the program. It's been limited because the program has started and stopped three times in six years. Programs really only been open about 50% of the time. Typical savings for a town about \$75,000 dollars a year, we know with COVID we are important that's going to be how impactful that can be to keeping staff. There are at least 30 municipalities queued up in the program, may you were just expecting the program to expand and I'm happy. Representative Arconti asking some questions about that I'll wait until the end because I'm happy to talk about why folks are in the queue, it has to do

with really the time it takes to get into the queue and the things that you have to do to be ready. For current proposal on SB 952 of \$10 million dollars with five going to the line school districts would clear less than 25% of the current queue, it would be most towns in the cold.

Finally, the last reason and we put a lot of good things about this today is grid resiliency and modernization. Generating energy where it's needed reduces the risk of outages. Distributed generation by its definition means creating energy where to use. Our projects contribute 300,000 to 500,000 per project in line and substation upgrades, Eversource in UI. Distributed energy is the precursor to micro grids, we've heard about that, battery storage and the work around EDCs that are going to be the future of kinetic energy. There are two reasons, you will hear against virtual net metering. The first is a cost shift. This is nonsense, nonsense is really the nicest thing I could think to say about this. VNM is not a cost shift.

Virtual net metering benefits the EDCs. How do we know this, we know this because DEEP and PURA commission to study of the value distributed energy that is putting energy where to, what did this study say? The study said that distributed energy is worth 14 cents a kilowatt hour. What do the EDCs pay us? When they provide, when we provide that energy, 11.5 cents. I'm going to go through this math, very important because it comes up over and over again. Generation today in Eversource or through is 8.5 cents and transmission and distribution right now is 7.3 cents, we get.

WILL GINN: That's time. I'm sorry about that.

JAIME SMITH: Time.

WILL GINN: Yeah.

JAIME SMITH: We get 40% of the value transmission and distribution, plus G that's 11.5 cents versus 14 cents. I'll stop and take questions.

SENATOR NEEDLEMAN (33RD): Thank you Jamie obviously your passion demonstrates itself. When you say that just to be clear and you could maybe correct me if I'm wrong, but when you say that the cost is 11 cents for the value of the solar that does not include the value to the municipalities, does it.

JAIME SMITH: The 11.5 cents would be, would be what we would see after giving the municipality savings, and so the difference between 14 cents and 11.5 cents, would some of that would go to the municipality, and some of that would go to the EDC.

SENATOR NEEDLEMAN (33RD): So, my understanding is that total cost is about 22 cents or 23 cents. Based on what municipalities that I know that have signed up are counting they get. They get it's 23 cents kilowatt hour. They get 11 cents and then the solar company gets the other 11 or 11.5 cents.

JAIME SMITH: That, I mean that's not the way the program works, into monetized build credit for us, we get for every credit 11.5, we get 14 cents and then basically we give 15% discount, we give two cents, one and a half to two cents to the municipality, and the difference is kept by the utility, so it doesn't really matter what they pay for electricity, we're giving them between one and a half and two cents. In the case of a three megawatt project its \$75,000 a year to the municipality and savings about a million and a half over the lifetime of the project. The 22 cents I'm not sure where that number was coming from that again generation is eight and a half cents. Transmission and distribution is seven cents, we get all of generation plus 40% of transmission and distribution, that's the way the program, is written. The EDC were involved in helping us craft that program 2014 and 2015.

SENATOR NEEDLEMAN (33RD): Okay Thank you so much I'm going to turn it over to a Representative Arconti.

REP. ARCONTI (109TH): Thanks, thanks Mr. Chair. So, you guys participating in the, in the pure docket so far.

JAIME SMITH: We are and I'm glad you ask, there are there is couple of challenges with it, though it's written in a way today that makes it unclear of virtual net meter can participate. And it's also capped and it also has an auction that's we're going to be competing against CNI, Roof Top Manufacturers and Businesses, so there are some limitations to it we've submitted our comments through Solar-con through the NACEC and we've been really active, we read through it many, many times and it's just needs a lot of work still.

REP. ARCONTI (109TH): Okay that's great. That's good to hear you know, I know Chairman Gillett is not afraid of hard work and taking that on, so I'm sure you guys will have a busy, busy three or four months over there under this docket and then a follow up question I had with the Federal ITC, would you be able to, you know granted whenever the, when the successor program does come online, we still be able to take advantage of the ITC with that successful program or is that something.

JAIME SMITH: It's a timing issue for us. It's 26, we got extended to 26% for two years that's 21, 22, it's a matter of how long it'll take us to get the projects going, you know our development cycle is typically 18 months to two years, so it's just going to come down to how quickly we can get to it. It's one of the reasons why we, like the idea hear, rather than just guessing at a number putting some kind of timing on an extension, extension, we also like the idea of maybe pure running a study. Because there's so much, I'd say difference of opinion on

the value of distributed energy and you know, we were up for, let's uncap it for a year and study, lets uncap it for two years and study and we we're open for that and we're open to sit down with you guys and walk through the numbers as well.

REP. ARCONTI (109TH): Yeah well, I think you know if I were to ever you know get to the point to be comfortable with right on capping in totality from what we've heard them testimony, you know I think we all need to kind of come together and have an agreement on the kilowatt price because right, you know I don't disagree with the numbers, you know you're giving us. I can only say from my position here, you know numbers we've gotten from you know DEEP Energy Bureau is the all-in price, you know you know, assuming to the wrecks that the developers go through, through the Z-VAC program afterwards that the all-in prices 20 to 22.

JAIME SMITH: You don't need REX, we don't need REX, as part of virtual net metering, they're disconnected programs, I think we and other developers have taken advantage of them when they were available, but they are unnecessary, we're building virtual engineering projects without REX, not required.

REP. ARCONTI (109TH): Okay, yes, I'm, sorry but.

JAIME SMITH: No.

REP. ARCONTI (109TH): Yeah, I've never got I've never received, you know when I've reached out, I've never received 11 cents a kilowatt hour price.

JAIME SMITH: 11.5, but yeah, so we're happy to show that to you and how it works, so and we're open to a cap. I mean we; you know Senator or Representative Arora talked about this a little bit. We just need We just need clarity and then give us a place to go run a little bit, it's been the starting and stopping and the capping that makes it hard. You

know we're a Connecticut Company, I said we started in Connecticut. We've got about 20% of our business in Connecticut and 80% in Massachusetts because the program was open. They did 3200 megawatts. You take a guess how much VNM, virtual net metering has actually been installed in the state. 50 megawatts. I looked at this number the other day it's 250 acres.

We are spending a lot of time talking about land use and things we were a drop in the bucket, it's been a very small program, it's been a great program for 26 municipality, but relatively small program.

REP. ARCONTI (109TH): That I could say, you know my biggest concern is you know from the 30,000 foot view level it's just pancaking you know programs, on top of each other, make commitments with.

JAIME SMITH: Because not, make it, make it a rule that we can't use REX, I mean, I think we if we have a reasonable number, we have 11.5 cents with reasonable interconnection costs and we'll go out and find the cheapest land, we can find and that's another thing we've built five projects, four of them have been either on gravel pits are next to dumps. We want to use farmland, we don't want to native force. That land can be used for better use, we want to find the worst land, that's natural for us and we're open to all those things.

REP. ARCONTI (109TH): That do you think you'd have permitting properly with the gravel sites, do you have, you know.

JAIME SMITH: We got four, we've done, four of them, I mean remember this is the only comment I wanted to make. Our projects are not the projects that are getting in environmental trouble. Our projects are 10 to 12 acres and we're governed by the Connecticut Siting Council and we get our storm water permits from the, we play by all the rules, you heard today. Katie and Vicki talking about the rules, the storm



water rules being updated, we are in those meetings, working right alongside DEEP to get those done. It hurts us when people you know, people have mud spilling into rivers or into creeks, that's a problem and that's not us that's the large that's the large procurements. If you trace all the challenges and you're going to hear a bunch of environmental groups that I can see, on your list of speakers, I'm telling you there is not any, we're 10 to 12 acres and we're distributed, not the big stuff.

REP. ARCONTI (109TH): Okay, thanks Jamie, I appreciate the feedback and that's it, Mr. Chair.

SENATOR NEEDLEMAN (33RD): Thank you, I see rep Foster.

REP. FOSTER (57TH): Hi I feel like I'd be participated today that your name is my maiden's name, so this is very funny indirectly beforehand, but thank you so much for being here today giving the pleasure to meet you and have the opportunity to speak to you, you've touched on something that I talked a little bit about with my local solar companies about the value of solar study and what was discovered about the cost of energy related to VNM projects. Do you think you could talk a little bit about this, because I know that there's a letter that your professional org put out that sort of talked about your opinion about that study, do you think you could tell us a little bit about?

JAIME SMITH: So, the study was commissioned by DEEP and PURA, it came out in July of last year, in in a draft form. It showed on page 10 figured number one that behind the meter and in front of the meter, solar is worth 14 cents, 14.1 cents per kilowatt hour. It basically figured out all the benefits of generation, the environmental benefits, the benefits and frankly undervalued, you got a lot of really important things. It didn't, didn't take into account the resiliency to the grid, it didn't take

into account, multiplier for jobs and the impact, economic impact in the state, so our view when it came out was it undervalue the, what we do, but fine it's 14 cents, it's certainly well above what we're being given as part of virtual net metering. Now the challenge and I think this Committees got to go ask, we were told, for two years that the results of that study would govern the future programs to successor programs to be now.

We're got, trying to roll out successful programs in VNM and we haven't heard anything about what's going on with this study, where it is, is it going to be finalized, we haven't heard anything so um I think that's you know that's worrisome to us, and we think it was well done in it, if you don't like that study, their studies that were done in Maryland, their studies that were done their studies, I think I read there's 32 value of distributed energy studies that have been done in the last five years, every states done, so they're out there I'm sure we could ask PURA and Resistive Opticos and I think it's really important that this group, listen to them and we're this, and this is the fine thing.

We're not against large scale deployments. We're not against fuel, you're not going to hear us ever coming up here and say fuel cells or back or large-scale procurements are bad or wind is bad, you know we need all of it, we need every bit of it but distributed energy is the starting point for micro grids, it's the starting point for some of the electric vehicle work that we're doing, it helps with resiliency, so we think at your team, we know you know this, you need it all, you need it all.

REP. FOSTER (57TH): And then I wanted to ask another question, and this is maybe a follow up and you'll have to excuse me, because I'm new to the General Assembly, but also new to this Committee, so perhaps there's a misunderstanding here, but I was listening to your exchange with Senator Needleman, the Chairman and I, I wonder if, when you're talking

about that value if you're, taking into consideration the tax stabilization agreements that exists with municipalities, I know that sometimes the these projects aren't always generating power for the town that they reside in, but is that considered in this equation that's run because I'm not, I'm not so sure that I've seen that and those calculations of the value of solar.

JAIME SMITH: As an additional benefit, there are some tax benefits. Personal property and real estate tax benefits. The fact that it's virtual means that the town where the solar project lives is not necessarily the town that gets the benefits of the project, so when we talk about municipalities in our case, many times it's, we're building it in one town, they're getting the tax benefits, but the credits are going to another town it just comes down to, how much load they have and what you need to have, how interested they are in that, but there are significant tax benefits in in the case of my company we try to negotiate up front tax agreement because it helps us with our financing to certainty of knowing what our taxes are. And so that's kind of our approach, you don't have to do that, you can just wait and get a millage rate and get a Bill like, like any business look, like any business look.

REP. FOSTER (57TH): I appreciate your answering my questions. Thanks so much.

JAIME SMITH: There's lots of people going after me, I don't want to be the only guy so, hold some your questions for these other, other groups, I really appreciate I've had more time than was probably fair, thank you.

REP. ARCONTI (109TH): You're on you're on the hot seat, Jamie so you got to answer all the questions.

JAIME SMITH: I don't mind.

WILL GINN: Norm, you're muted.

SENATOR NEEDLEMAN (33RD): Representative Meskers.

REP. MESKERS (150TH): Thank you. Jamie. I want to thank you for the testimony. You've been pretty active in your conversation or in your lobbying today, and I think the information's are really good. You comment on those, those three aspects that caught my attention is it's now, in your last comment that so in the, in the structure of the, in the solar, the three four acre property you're basically taking property that has got a low tax rate, I'm assuming you're, it's either low or close to zero and you're bringing it up on the tax rolls that comes that, is that the case.

JAIME SMITH: That's correct, in fact, I think we were just looking at one, we did in East Windsor, it was next to a dump I think that what we pay is 150 times now, what was the tax rate on that property before solar was put on.

REP. MESKERS (150TH): So, you know, I don't want to torture you with request for information, but if you've gotten one or two of the projects before and after mill rates.

JAIME SMITH: Yeah.

REP. MESKERS (150TH): If you've got, if you've got an estimate of the payroll to put this project together.

JAIME SMITH: Yeah.

REP. MESKERS (150TH): In terms of construction because you know I'm sitting here on, on energy technology and Norman and David are always going to beat me intellectually and then I said on finance, so where, where I'm going to go with this is, you know, they're going to help guide me on. Are you providing a valuable electric source and stability,

I mean I follow it, I know it, I'm on the same page, I think, then, the question is what's my benefit because I, while you talked about purchasing outside the state versus inside side state, I think the economic impedes for real estate and stuff on the mill, bringing stuff back on the mill rate, the salaries in terms of general income tax and then what is the operation look like going forward? How much maintenance, you know, is it one or two people for each, you know how many people, you have employed for each installation on average and kind of without giving away companies secrets, average type of salary levels, because what I want to figure out what's the, what's the input, you know I, as a citizen of state and as a Representative, we have a choice of directing our ratepayers, tax dollar into economic activity that happens outside the state or happens inside the state and if it's going to be reoccurring this data facility, I think those are things that particular interest through us.

JAIME SMITH: Right. I'm happy to do that Representative Meskers. Our questions, we, again I don't think we're using taxpayer dollars, because we are taking less than the value but, that being said, the math that I would provide, we have a model from NEL, which is the national lab, or energy labs the one out in Colorado and it's called the Jenai model it's useful on.

REP. MESKERS (150TH): Okay.

JAIME SMITH: Jobs and economic development impact and that's what we built and we looked at \$50 million dollars, which would be a \$30 million dollar raise of the CAP, and it was just under a 1000 that, that amount is about 105 megawatts so we just did the math it's nine jobs per megawatt and that's a combination of the jobs to when you build a project and the ongoing operations and maintenance, we would go out.

REP. MESKERS (150TH): Okay.

JAIME SMITH: Four times a year, at least, and do electrical maintenance on the job, on the project we do lawn service and all the cutting of trees and all that at least twice a year, so there is ongoing work that's being done along with a heavy load of electrical and civil work when we get to the original site.

REP. MESKERS (150TH): Yeah. I guess what I mean taxpayer are executing right there and the point being my ratepayer dollars wired you know to some green suicides off pops out of state or it's going to be my repay dollars go to green and green exercise instead and those green state they're going to create tax dollars in jobs, etcetera, and I don't want to overpay for that value, but this value.

JAIME SMITH: Let us know, how you want us to provide that it's not our data, it's a model from the national lab, so you know we'll follow up I'll probably do that through my tray hand at our solar kind of work through any CC associations, but we'll get that okay anyway, anyway, we can anywhere, we go.

REP. MESKERS (150TH): Alright, thank you very much, that finishes with me, thank you.

SENATOR NEEDLEMAN (33RD): Thank you, Representative Meskers. Representative Arora.

REP. ARORA (151ST): Yeah, I'm unmuted yes out there, thank you Mr. Chair, thank you Jamie for your great testimony, you know, I just want to have one question because, as you know, we have a number of other, others who want to testify one quick question I like the 11.5 cents you're putting forward all in. You know that that can spare a lot of development. I just want you to tell if that 11.5 cents were unconstrained, if you were given 11 cents or even an auction system, how much could possibly the industry do at 11 cents or lower or those kind of circle

rates, are we talking about 5 megawatts, are we talking about 500 megawatts, you know because I want to see because we're very interested in scale and really doing it at lower costs, so I want us all to hear, where are you? How much can you do? How much capital and entrepreneurship and land is there or possibilities are there in the in the beautiful state of Connecticut.

JAIME SMITH: So, I would just draw our attention again. Thanks for the question Representative Arora. I draw our attention to Massachusetts who started behind us and I would say had programs that are a little more open ended and clear and they did 3200 megawatts and so they're twice our size, I think we do three gigawatts or three and a half gigawatts and they do, maybe six. We could do 1000 megawatts if we were unconstrained now, we would want to be very smart about land use, and we want to as an it, as an industry push towards the areas really can't do anything else, and you know Massachusetts did a good job of that by creating incentives for brownfields, incentives for canopies to try to get us off of flat land. And so, I think those kinds of constructs are a really good idea for us, but I would think we could do 1000 megawatts, 1500 megawatts. Our industry is not constrained by the financing.

We have more capital, more tax equity, then we can we can find good projects to use. So, I think you would get a number of developers coming back into the state and bringing jobs back into we're in Massachusetts who are now in Maine. By the way, that's sort of the next hot state and they've all moved from Massachusetts to Maine and many of them, given the size of the overall program in Connecticut don't set up offices, here we don't have a lot of the big national help because you know, yeah.

REP. ARORA (151ST): So, do you, guys sorry for interrupting, I do have problem with time, so do you think that perhaps if it's an open unconstrained, no megawatts limit program, could you go down, you

know, but we obviously we would sense it's attractive industry, maybe you can go down a tad but even under 11.5, maybe 10.5, you know, can you tackle it?

JAIME SMITH: We can do that, and what that requires is probably good interconnections, because you know we need help from the EDCs on the interconnection costs because they can gold plate those and take us to a project that looks great and make it unattractive to us, so we would probably just need a little bit of fairness there, but I think if we had that we'd only be constrained by making sure that we were on the right kinds of land and staying away from the watersheds and doing those kinds of things and we can help, you know, help, Katie the Commissioner, hit her goals and we have all these large scale programs and small and, and I think that that distributed grids going to be amazing with fuel cells with batteries, with all the things that we're talking about going to help us with resiliency.

REP. ARORA (151ST): Well, thank you so much, I really find it very exciting that you're talking about 10 cents you're talking about 11 cents, which you really need is the opportunity to just build, to basically an unconstrained programs and 10 cents is really you know I know I'm putting words in your mouth, some cents, but then 10 cents really close to what we pay for energy right now, because we're at 8.7 or something like that or 30 so, so I think we're very close that subsidy is very, very little here. You know, and there is obviously lots of value now I, I am, I different from you, I don't want to, I want the rate bear to keep the value not to essentially get the other four cents to but, but nevertheless I do think you do a great job and it's we're trying hard and I'll tell you everybody across style in the Committee, is really focused to give that opportunity to develop at market rates or at these rates, it's just a 22 and the 15 and the 18 which are hard, hard to digest for us, but when you come close to 10 cents, we are, we're going to work



hard to discuss and provide opportunity for unconstrained development because that's the future of energy. Thank you so much.

JAIME SMITH: Thank you.

SENATOR NEEDLEMAN (33RD): Thank you Representative Arora, Representative Mushinsky.

REP. MUSHINSKY (85TH): Thank you, Mr. Speaker and Mr. Chairman. I wanted to ask our witness so in Wallingford, we have 10 megawatts commercial solar going up on our landfill, which is a good thing. However, to get the 10 megawatts they had to spill over onto the river floodplain and that's a bad thing they took out floodplain trees to get their full 10 megawatts. Even though there's a full-size warehouse now occupied by Amazon next door to the site, and I was trying to get citing console to direct them to use the roof of the warehouse rather than cut down the trees along the river, which they did not do. Why, in Connecticut, why are so many of the units showing up on valuable land rather than on rooftops and building in parking lot, parking lots such as is done in Europe, especially in Germany, so why don't we do that here in Connecticut, what is stopping us.

JAIME SMITH: Thank you. Thank you, Representative Mushinsky. Good questions. The challenges, it's significantly more expensive to build on rooftops and barking canopies than it is to build in a field. And so, we need we need incentives to push us in those directions, or we need penalties to take us away from others and that's really if you look at again, you know Massachusetts doesn't do everything right, but this is an area they do a good job. They set up that base rate that we were just talking to Representative Arora about, and then they have carrots and sticks, if you take some prime farmland, you get less if you are going to be on a landfill, you might get a little more, because your costs and they've spent a lot of time thinking about that and

it's funny you know we're doing the largest canopy right now in Massachusetts. And they've given us just enough money to pay for the canopy and nothing else, I mean it's a really thought it out in a way that they it's equal to us to do canopy where do brown mount.

And so, it just requires really good thoughtful construction of your programs. And that's it and the other thing for us is we, we start by going to Eversource or UI and saying I've got a piece of land, can I put solar there and you know, half the time, the answer is no, the winds don't have the capacity, there's a problem we don't want the energy there, so we, we go to these maps that they provide to us and we look around and try to find a pieces of land that people are going to be looking at, be flat and no trees and then we're also have this massive constraint of how do we, you tell he doesn't want the energy and only in certain places, so it's a jigsaw puzzle for us that's sometimes why you'll see us put it on one piece of land that maybe you didn't think was perfect but we're trying to balance all those competing interests.

REP. MUSHINSKY (85TH): Okay, so if we took the price signals from Massachusetts and put them in place in Connecticut that would steer the project better.

JAIME SMITH: Absolutely.

REP. MUSHINSKY (85TH): Okay. Thank you.

JAIME SMITH: Yeah, brownfield we love brown, I mean brownfields are great, but it's very expensive, you can imagine building a landfill, the solar panels are not turned in the right direction, you can't penetrate, the cost you've got legal liability issues it's just a much more expensive to build, but we can as an industry, we can help you guys articulate that additional cost and Massachusetts has done a good job of it.

SENATOR NEEDLEMAN (33RD): Thank you so much Jamie for energy, solar one on one. I do want to take a minute and remind everybody that we have 99 people on our list today, and we are probably through the first 14 and it's five hours into the hearing and I would really remind everybody that people do want to get a chance to talk, but we're going to be here for a long time based on the rate at which we're moving along so please do, you can't keep the comments related to the Bills on the last that possible and other questions that are more general might be best off ask to the speakers offline, so thank you with that. Will, who's up next.

WILL GINN: We have first select, first selectman Moynihan followed by Steve Zuretti.

SENATOR NEEDLEMAN (33RD): Kevin, you're muted Kevin.

KEVIN MOYNIHAN: I see, Hi gentleman. Good afternoon Senator Needleman, Representative Arconti and Members of the Committee. My name is Kevin Moynihan and I'm first selectman of the town of Canaan. I appreciate this opportunity to testify before the commenting on SB 937. As first elected a New Canaan is November 2017. I had the opportunity to observe Eversource's performance in the aftermath surprise storms in 2018 and 2019. Before last August tropical storm ECAS, I had a lot of respect for every source as a company, as I had visited their emergency operations facility in Newtown in 2018 and I was highly impressed by their people and their facilities and protocols for managing storm response.

I compared Eversource to the US military of being organized prepared and effective in their emergency planning. I would know, at the outset, the Cannon's first responders and public works personnel are acutely aware of the dangers of live electric wires, because almost 30 years ago on July 23, 1991 New

Canaan police officer, James Barton was electrocuted and died when he stepped into standing water on the New Canaan road had downplay power wire in it. I would like to dedicate my testimony today's the memory of Officer Martin. New Cannon like surrounding cities and towns was heavily impacted by the tree damage and loss of power and telecommunications and Internet services due to the high winds of tropical storm ECAS on August 4, 2020.

At the peak more than 90% of New Cannon residents and businesses were without power and power was not restored for all customers until seven days and more after the storm. More important than the inconvenience to our residents of being without power for several days, however, was the risk to human life caused by block roads and down electric wires that last for more than 48 hours after the storm. In prior storms New Cannon had worked out a protocol of having Eversource area operations technician embedded in our Emergency Operations Center in the aftermath of the storm, which enabled EOC and public risk crews to immediately go to work together with Eversource to open block roads and have Eversource de-energized down power white lines that endangered residents and first responders. In the aftermath of tropical storm EOC, Eversource was nowhere to be seen in the 48 hours after August 4.

Our EOC team and public works crews were in disbelief about the inability to communicate with Eversource about opening block roads and down power lines. MACA protocols must be the absolute first priority for Eversource and other electric utilities in the aftermath of a storm. Pure has or should have the power, to mandate by regulation, Eversource work with municipalities to protect human life by opening blocked roads and de-energizing down power lines before any restoration of power can begin and we urge you to exercise that. We urge you to require, exercise that power. The other major failure by Eversource is that I observed with tropical storm ECAS was a complete breakdown in communications.

New Cannon residents were not able to report outages to Eversource.

And our EOC team and public work crews were unable to obtain timely and reliable information about outages in New Canaan and about plans by Eversource crews or contract crews to rely New Canaan to open roads, to begin restoration. In the view of EOCT and Eversource appear to be completely overwhelmed and disorganized in the first days after August 4. From our perspective, Eversource had a major breakdown and failure in those storm response efforts. It may be, these failures stem and apart from COVID-19 restrictions that prevented Eversource's personnel from working together collaboratively and would contract crews from Canada and other states, but we cannot know to what degree, that was the cause. It's our hope that the enactment of SB 937 will spur PURA to develop regulatory requirements to assure that such failures never happen again, I thank you for the opportunity to testify. Happy to take questions.

SENATOR NEEDLEMAN (33RD): Thank you so much Kevin. I really appreciate your testifying needless to say, I experienced the same things in Essex.

I have some thoughts as to why that happened also, but and I've been working aggressively with and resource says been more willing to listen then, then in the past. I'm hoping that that never happens again, but it was a catastrophic breakdown in communication, and they acknowledged at this point, so with that Representative Cheeseman, you have your hand up.

REP. CHEESEMAN (37TH): I do. Thank you, Mr. Chair, thank you for coming here today. Kevin, quick question, you said you toward the Eversource facilities, you were very impressed, have you seen a change in the level of their response, you know prior to I say yes, and what actually happened during the recent storm.

KEVIN MOYNIHAN: They've got much better communication obviously they; they got the message that the failure requires that they've been in communication. We don't know yet, I think they did a better job in a recent storm and make safe, to make safe is a number one concern, I mean it's life and death and there has to be a protocol that we can enforce with them that they have to show up, they have to, they have to they have to be there in the.

REP. CHEESEMAN (37TH): What had been your experience with them prior to ECOS.

KEVIN MOYNIHAN: Again, I had been new to it, new to it, we had a few major storms in 2018, minor storms in 2018 and 19. They were obviously much better, I mean there was a complete failure on August 4. They, they, they were better so again I, I was very impressed it's like you know it's like the army, they have all the tools and they seem very organized but and I think they have the capabilities to. The other thing was when out of state crews and Canada crews arrived, they were driving back from New Cannon to Springfield and wish to overnight and then drive back. The most inefficient process and then it'd be sitting in our parking lots with no directions for Eversource, so obviously the ECOS was a major problem and they look like, they're paying attention now and proven, but they have to have a regulatory requirement on make safe, they just have to, they have to be there.

REP. CHEESEMAN (37TH): Thank you and do you think having a dedicated Eversource person, oh, either for your town or a couple of towns would make a difference in terms of relaying those makes safe requirements.

KEVIN MOYNIHAN: Yes, they have their liaisons now working with communication, so I think they have the ability to deliver on make safe.

REP. CHEESEMAN (37TH): Okay, thank you, thank you, Mr. Chair and Mr. Moynihan, I'm to pass on from Representative Hoday, his best wishes and he hopes you stick around for a while, as in New Canaan, so thank you, thank you, thank you.

KEVIN MOYNIHAN: Thank you.

SENATOR NEEDLEMAN (33RD): Thank you so much, first like Moynahan. I appreciate your coming today, although you didn't come, it looks like you're in your office, we keep saying that for coming down to talk to us, we're all in our bedrooms at this point.

KEVIN MOYNIHAN: Well, thank you for all your service, I know the hours you put in so I'm very impressed, thank you.

SENATOR NEEDLEMAN (33RD): Thank you so much. Will who's next.

WILL GINN: That's going to be Steve Zuretti followed by Jon Delgadillo.

STEVE ZURETTI: Good afternoon, Chair Needleman, Chair Arconti, and Members of the Committee. My name is Steve Zuretti, I'm testifying on elements of SB 882 and SB 952 on behalf of Brookfield Renewable. Brookfield Renewable is a renewable energy company with a portfolio that includes hydropower wind distributed solar and pumped hydro and battery storage. I provided some detailed comments to the Committee in writing so I'll keep my testimony today brief and very high level. First, we were supportive of the directive in SB 882 to establish a zero-carbon electricity mix. Our only recommendation, there would be to consider the potential to expedite that and that's really given the benefits that a zero-carbon electricity mix might provide to carbon reduction efforts in other sectors like transportation and buildings.

Second, we're especially supportive of the energy storage procurement language in SB 952 and we appreciate that that Bill has a focus transmission connected storage, in addition to distribution connected storage and, finally, as the Committee is thinking about renewable energy policy in general, we encourage expanding how the region's existing small-scale hydropower is participating in the RPS Program. In our written comments provide some detailed suggestions on this but, in general, we believe this is a significant resource class and more can and really should be done to optimize and retain these resources.

Particularly in the context of policies to achieve carbon reductions and we think near term policy action would really align well with what the recent IRP describes as an anticipated decline and how biomass participates in the RPS. So, this dynamic really provides an opportunity for greater reliance on small scale hydro, while still leaving significant headroom for new renewables development as well, and with that I thank you for the opportunity to comment and happy to answer any questions.

SENATOR NEEDLEMAN (33RD): Thank you, Steve, I appreciate it, I don't see anyone with their hands raised. Calling once, twice, three times. Thank you so much for your testimony. Will, up next.

WILL GINN: Up next is Jon Delgadillo on I'm butchering the name I'm really sorry and then after that it's going to be Susan Young.

SENATOR NEEDLEMAN (33RD): Got that one right.

WILL GINN: I got right.

SENATOR NEEDLEMAN (33RD): Susan Young.

WILL GINN: Perfect.



SENATOR NEEDLEMAN (33RD): Jon.

JON DELGADILLO: Thank you, everyone. Thank you, Chairman, thank you for the opportunity here to provide this testimony. Jon Delgadillo from the city of New Britain, manager of facilities and energy for the city here, I want to speak on behalf of Bill 952, I believe also 6523, but I also have favoritism for Bill 950 and 6524, which I'll get into later, but my main purpose, for this is obviously to increase to be a capital man. The city currently has two landfill solar projects in the works. I'm sure you guys have been talking about this throughout the last few hours, about the need to you know utilize better land, and I think no other better land available than landfill projects.

They currently have the interconnections all set up for both of these projects and both of the landfills. It's just been stranded in there since about 2018, we started to work on one of the landfills, the process of getting these VNMS and haven't been able to get there, because of the caps. Really these projects are going to be a huge financial benefit to the city obviously all the cities have been really heard in between lot of vast revenue we gained in 2020 due to COVID and this is definitely some revenue that I'm sure all cities related, but especially the city be brave can utilize in further projects. City has been involved with a lot of solar projects; obviously, a lot of it depends on these VNMS. We also involved with anaerobic digesters in the state too.

So city has been strongly you know pursuing projects with resiliency, renewable energy and we really want to have these two projects on our list of you know, positive stuff that we did for the state, positive things for the city, as well as the financial benefit obviously that these were brief for the city alone and you know, we have had these projects in the queue for quite some time, so you know, without raising the CAP limit, with the CAP lift for VNMS

that probably will be stranded there, and you know we be losing out in that lost revenue, so I really hope for everybody to be in favor of raising this CAP limit.

Again, I think the city will benefit, it's a landfill project. I believe all these solar companies really want to do is benefit the city, benefit the state in general with positive projects that will provide resiliency and further stuff and I also have to say some benefit to fuel cells, because the city has a lot of investment going on in the city with Fuel Cell Energy. So, I really hope you guys vote in favor for fuel cells, because we're definitely have a lot of financial benefit if fuel cells become, you know, get the recognition that they deserve from PURA and with some of the credits that they deserve as well because that's additional tax money that the city, really, really needs.

I'm sure, a lot of cities could utilize and all of these abundant factories and other types of buildings, like that that we don't have too much use for, but these fuel cell companies really want to utilize it. So again, in favor of, really for the VNM capital man, but I also have a favorite fuel cell in storage batteries as well because that's really what's going to drive some solar projects, especially for us in the city, we have a lot of buildings that could utilize it, but without the storage it doesn't make it worth it so, um, thank you again for this opportunity and hopefully you guys move forward and positive to reflect all these projects that can help benefit the city new brand as well as other cities throughout the state.

SENATOR NEEDLEMAN (33RD): Thank you Jon. I don't see anybody with any questions. I really appreciate in testifying today.

JON DELGADILLO: Thank you, Senator.

SENATOR NEEDLEMAN (33RD): Will.

WILL GINN: Next is Susan Young followed by rep Rochelle.

SUSAN YOUNG: Hello, can everyone hear me.

SENATOR NEEDLEMAN (33RD): Yeah. We hear you.

SUSAN YOUNG: Yes.

SENATOR NEEDLEMAN (33RD): Thank you Susan.

SUSAN YOUNG: Thank you. Good afternoon Senator Needleman, Members of the Energy and Technology Committee. My name is Susan Young and I am the Community Marketing Manager for PosiGolar. You know, thanks for the opportunity to speak regarding SB 951 this afternoon. PosiGen offers 100% finance into 100% of rooftop solar feasible homeowners in the state of Connecticut and is proud to include energy efficiency upgrade with a low cost, fixed price lease, which delivers an average savings of up to roughly about \$1300 dollars for Connecticut Homeowners.

Just a few comments about the Bill SB 951 regarding door-to-door canvassing, which is a crucial part of a PosiGen do in our community outreach and education. Making solar affordable and accessible to every homeowner regardless of their income or their credit score. PosiGen already complies with most of the mandates included in this Bill with regards to identification badges, company branded materials, telemarketing regulations and or employees really do, are trained consistently, and we also do have, we are also, you know, in good, we have a good neighbor canvassing timeframe of 10 a.m. to 6 p.m. and we do not utilize any independent subcontractors for canvassing.

Unlike most other solar providers, we only have four standardized system size option and that allows us to keep our costs very low. The only section that

cause us some concerns is section 2A requiring that all rates' fees, variable changes charges, excuse me, terms and condition be provided at that initial appointment. Because a significant percentage of our Homeowners are low-income families, we frequently find potential customers with roof that need for peer or their electrical system needs to be upgraded up to code or that their home may just not be energy efficient at all, so those are a lot of things that we have to assess before moving on to help in that client, that customer. So due to these frequent known and unknown, it would be challenging for us to provide a high-quality full disclosure at the time of the initial meeting. So, we are happy to provide a one pager that attempt to summarize or typical terms, but we would ask that any approved legislation allow for these unique variables that are present with all rooftop solar installation.

One thing, though, that is really critical of major concern is the fast approaching our SIP extends incentive exhaustion. We need to you know, the need for the extender is not yet scheduled for commedia discussion. PosiGen depends on this modest incentive to enable us to offer or low-cost fix solar lease to low-income families to Homeowners ensuring that they are able to enjoy the full financial benefit of the solar and energy efficiency program. We would ask that this critical issue be attend, be added to the Committee's agenda, so we can consider one final extension to get us to the new solar tariffs in 2000, early 2022. Thank you for this opportunity to testify, and thank you all for all that you are doing to promote the benefits of clean energy to all Connecticut residents, thank you.

SENATOR NEEDLEMAN (33RD): Thank you so much Susan. I really appreciate that and thank you for testifying. I don't see anybody with their hand raise. So, Will.

WILL GINN: Alright. Next up is Representative Rochelle, followed by Kyle Wallace.

KARA ROCHELLE: Thank you. Good afternoon everybody, Senator Needleman, Representative Arconti, Sanders Winfield and Representative Allie Brennan, Ranking Members Formica and Ferraro and Distinguished Members of the Energy and Technology Committee. I am here to express my strong support for HB 6523 and that's concerning virtual net metering credits for manufacturers in distressed municipalities. This Bill will help support manufacturing in the state of Connecticut specifically addressing high energy costs for those who choose to home, their business in distress municipalities, bringing jobs were needed most. This Bill also increases the use of renewable energy options, by allowing this sector to take advantage of the virtual net metering program, which is not only good for the environment, but good for businesses.

We are finding it smart to go clean and green. Currently, our state house virtual net metering for municipalities and agricultural energy users by extending benefits of this program manufacturers in targeted communities or distressed municipalities, it will empower manufacturers to achieve higher levels of sustainability, while also providing them an avenue to save money to invest in jobs and business growth. It is my hope that the Bill will allow virtual, virtual net metering in two ways. One manufacturer located in distress municipality could use class one, two or three technologies to power, their facility and share excess power with another manufacturer in the same company and two, manufacture located in a distressed municipality could use power provided by an energy developer somewhere else within the distress municipality and so is the manufacturer via virtual net metering. Over the past several years, the manufacturing industry has grown rapidly. In 2019, it was it was third largest growing field in the state of Connecticut.

However, the recent recession has spared no sector and manufacturers have struggled as well, they still have not recovered the jobs that were lost during that time, but they are going back rapidly. As kind of get recovered from the pandemic supporting our manufacturing industry in attracting incentivizing business expansion is vital, especially in our most economically distressed communities, which pays higher unemployment rates and seek up and we must seek efforts to grow these economies and especially during these challenging and complicated times. I represent Ansonia in Derby, to such economic distress municipalities in the Naugatuck Valley. The valley was once the heart of Connecticut's economy for the post war era, up to the 1970s and Sonia and Derby alone employed over 10,000 people to give you context, there are 13,000 people in Derby.

There were just, these were good paying jobs that open doors for the middle class. Today these two cities are in stark contrast to what they once were and Sonia is the number one, was economically distressed municipality in the state of Connecticut and Derby is first. Due in part to globalization, technology advances in storing energy costs, only a small fraction of Ansonia and Derby residents today are employed in manufacturing. It is critical that the manufacturers that we do have our support it, so that they can keep their doors open, employ our residents and grow their businesses. With energy costs being a large part of the manufacturer's budget, this Bill would help greatly. Manufacturers are under every mounting pressure from customers, stakeholders, investors and employees to improve their environmental sustainability practices as well. You know, this is a marketing issue for these manufacturers as well.

Manufacturers are often heavy energy users and Connecticut's high energy costs are a disincentive to manufacturing facilities taking root in our state. Major energy suppliers have not taken meaningful steps to reduce energy costs to make our

state more tedious for business and in fact, Eversource recently announced it would seek another large rate increase to be footed by vacate ratepayers to make up for costs incurred over the past year. This will further harm manufacturing growth in Connecticut.

There is a solution, a target expansion of virtual in that meeting would create economic value for our manufacturers and our distress municipalities and improve the sustainability of manufacturing in the region, the reasons that needed most, this while upgrading its green energy profile, with potentially improve our ability to compete for certain business opportunities as green business practices are desirable for consumers. Our state is moving to decrease its reliance on fossil fuels and investment as development of green, technology and renewables.

Busting understates green future and economic prosperity should be top priorities, supporting manufacturing, the manufacturing industry and finding ways to promote job growth in just municipalities must be top priorities as well. I enthusiastically and respectfully request support from this Committee on this proposal. Thank you.

SENATOR NEEDLEMAN (33RD): Thank you rep Rochelle. Rep Arconti.

REP. ARCONTI (109TH): Thanks, thanks Mr. Chair, thanks Representative. No really question just a comment of support, you know you've been such a strong proponent of our manufacturing sector since becoming a member of the legislature. You know, I don't know if Dan Barry, you know meets the definition of a distressed municipality Courtney DCD but I know we are an alliance district and we could certainly use some of the resources you've been describing as well, so just want to say those remarks and looking forward to continuing working with you and my colleagues on this Committee on this proposal, thank you.

KARA ROCHELLE: Thank you.

SENATOR NEEDLEMAN (33RD): Will, who's next.

WILL GINN: Next up is Kyle Wallace, followed by Michael Harris.

KYLE WALLACE: Thank you, Chair Arconti and Needleman, Ranking Members Formica and Ferraro and all Members of the Energy and Technology Committee. I appreciate the opportunity to speak in support of two Bills today, the first that summer on sports is SB 882, which sets the 100% zero carbon electricity goal by 2040. We believe that codifying this goal will help drive the state's energy policy and programs over the next two decades to help combat climate change.

You know, we believe a zero-carbon electric grid is the backbone of a cleaner future where transportation and heating are increasingly electrified and over the next few decades, we could see electric demand as much as double as the state works to meet the emission reduction targets under the global warming solutions act and we want to make sure that that increased electric load is being served by clean, renewable electricity and not just going from one carbon emitting fuel to another. One key piece of that zero-carbon electric grid is going to be energy storage and so in that vein, we support specifically sections wanting to have SB 952, which establishes the one-gigawatt energy storage target by 2030 and requires PURA to create programs to help achieve that target. Energy storage is such a dynamic technology, it's just now becoming widely available, but it has the potential to provide immense benefits to the electric grid and all ratepayers.

It's very important to note that this legislation requires the energy storage programs be designed so that the energy storage systems are operating in



ways that will actually deliver net ratepayer benefit. Over the next decade, I believe, will see an increase in the value of energy storage, as additional values are quantified and as the technology evolves costs decline and regulatory and market frameworks adapt to this new technology. While PURA is already developing energy storage programs that would meet these requirements in this legislation, we feel that codifying these programs provides the necessary stability for the market to help me that one gigawatt by 2030 target. Also, just want to touch on the real-world resilience benefits that solar plus energy storage provides which are major reason, these energy storage programs, particularly for residential and CNI customers is really, are really important.

During the recent extreme weather in Texas, and a company in energy crisis, there were hundreds of residents who had solar and storage in their home and were able to power through multiple days of outages. While, in some cases that may not have been full home backup, at least in power critical load, such as water pumps, space heaters and lights, sees customers will be able to share their clean safe backup power running water and heat with their neighbors. For those fortunate customers they're able to at least partially minimize the trauma and devastation of that event.

Just last summer, Connecticut also experience extended outages and you know it's only after these types of experiences that the real value of clean, safe back and powers truly appreciate it. Following that storm Sonoran began offering energy storage as a product in November here in Connecticut in anticipation of these energy storage programs beginning in early 2022. We hope that with this legislation and the programs being developed by PURA that solar and storage will soon become the default option for all customers and thank you for your time.

SENATOR NEEDLEMAN (33RD): Thanks so much Kyle. I don't see anybody's hand raised. Have a great day. Will, who's next.

WILL GINN: Next up, we have Michael Harris, followed by Dan Allegretti.

MICHAEL HARRIS: Chairman Arconti and Chairman Needleman and Distinguished Members of the Energy and Technology Committee. Thank you for the opportunity to speak, I am Michael Harris, a resident of Deep River and in energy consultant working in the role of energy coordinator for the city of Middletown. My comments emerged from my perspective, on behalf of the Community of Middletown, Connecticut as well as my DEEP personal conviction about climate disruption. I'm here to speak and supportive Senate Bills 882 and 952 and house Bills 6527 with the following qualifications. SB 882, an act concerning climate change mitigation and home energy affordability tries to do a lot, perhaps too much. I support codifying the Governor's executive order to achieve a carbon free electric grid by 2040. But the Bill as written is also flawed and that it's six carbon free electricity only for that energy consumed in Connecticut.

The Bill needs to apply to all electricity generated in Connecticut, as you know, the clean futures act brought forward in the House of Representatives on Tuesday proposes a national clean energy standard that would require all retail electric providers to generate 100% of their power from zero emissions resources by 2035. So, we will need to coordinate with these goals if it is made into law. It is good news that creating the legal framework to achieve carbon free electricity will provide a fuller context for actions to combat climate disruption. Such a context has been cited as being needed to enact a moratorium, a new fossil fuel generating facilities.

Despite this perception, I believe this Bill should include a moratorium to move us firmly toward the clean energy future. Such a context, already exists. The science is compelling climate disruption is an existential issue for the entire planet and the state has greenhouse gas reduction goals, integrated resource plans, renewable portfolio standards, and of course the Governor's executive order. The context is robust. I support the provisions for demand response and energy efficiency and the Bill and note that there are other Bills with similar intense such as SB 356 and the housing Committee and HB 6527. Clearly, clearly there is coordination needed among these Bills and perhaps SB 882 can become more focused by strengthening the provisions of these other Bills, with the language currently in 882.

I do question the breath of the authority granted to the Commissioner of DEEP with regard to setting greenhouse gas reduction and electricity supply and generation targets. The Bill should clarify the DEEP Commissioners role, including checks and balances and offer goal setting through process and participation that is fact base. SB 952 an act concerning certain solar energy projects, proposes to raise the virtual meter CAP, virtual net meter CAP, but it does not go far enough. The VNM program provides municipalities with significant cost reductions, while doing an amazing job and facilitating the development of solar resources.

With VNM property taxes can be reduced, local jobs are created, RPS goals are realized, the electric grid is made more resilient and progress is made toward 100% clean, renewable electricity. The VNM CAP should be eliminated. Related to the support that VNM provides for clean energy is the provision in the Bill for energy storage. I strongly support this provision as an essential element of a renewable energy future. I would also comment that I do not agree that fuel cells need to continue to sell their current product that relies on natural

gas in order to develop a hydrogen alternative. Moreover, there are other storage options, including liquid air storage that uses much lower technology and can provide longer term storage than batteries. Finally, with regard to HB 6527, an act increasing the total output of Class 3 sources, I fully support increasing Class 3 resource goals and wish to point out that the goals are too modest, more needs to be done given the emergency nature of climate disruption. Thank you for the opportunity to speak. I commend the Committee for your diligent work in these areas.

SENATOR NEEDLEMAN (33RD): Thank you so much Michael. I'm trying to see if I see anybody's hand up here. Not seeing anyone.

REP. FERRARO (117TH): Charles hand up.

SENATOR NEEDLEMAN (33RD): Oh, I'm sorry Charlie. I lost that's screen. Go ahead, Charlie.

REP. FERRARO (117TH): Thank you, Mr. Chair. I just have a question for the last testimony person, giving the last testimony. Could I ask him a question please?

MICHAEL HARRIS: Okay.

REP. FERRARO (117TH): Okay, great. Sir I'm just so, for my own information and I've seen the metamorphosis of global warming to go overseas contingencies to climate change, now I noticed you're using the word climate disruptions, is there a reason for that change or is that describing different phenomenon, or the same phenomenon that we've been dealing with, with regards to resiliency in you know, carbon-based issues with the environment. I'm just trying to figure out what you mean by that.

MICHAEL HARRIS: Oh, well it's the language that I choose to use Representative, and I think it's

appropriate for the urgency and the severity of the issue and that doesn't apply, imply that anything's changed, other than that we recognize more fully are under appreciation for what's happening to the climate, to the environment so that's the language I choose to use.

REP. FERRARO (117TH): I have a question that I just want to know the scope of what we're talking about with regards to that, how are you defining that, can you just kind of like give me a rough idea of what's included in climate disruptions.

MICHAEL HARRIS: Well. We're aware of it, the extreme weather events but and that and that it's a great deal of evidence to say that that is related to this disruption, but I, I would say that, ultimately, it has to do with the increased carbon presence in the atmosphere which is increasing the heat holding capacities of the planet, and in fact the researcher Yay up in Harvard acknowledges that there were more threatened right now by the rapidly in its, the rate of change of temperature that is most threatening that there's actually a little bit of headroom in terms of carbon dioxide in the atmosphere, but the fact is there are multiple and numerous self-reinforcing feedback loops that are being triggered by this increasing warming and increasing carbon and in terms of system change things could go awry very quickly because of these feedback loops, so I hope that answers your question.

REP. FERRARO (117TH): I'm just want to make sure that there's not some new climatic phenomenon that I'm not aware of. As you know, this Committee is very, very concerned about reaching our goals and trying to bring our grid to 100% carbon free grid by you know our, within our timeframe and we're dealing with is you know coastal resiliency issues increased sea change, sea rises and what have you and I just wanted, when I heard that term, since I've never heard it before you said that way, I just want to

make sure we're not missing something that we need to be aware of and, but we are talking about technically, the same battery of climate issues that we've been talking about. You're not using the term to encompass something new, is when I'm trying to find that.

MICHAEL HARRIS: Well, I can't really speak to how much of the problem you're aware of, or appreciate I'm not tuned into all of your conversations. You know there's, there's a range of perceptions in terms of these feedback loops and the rapidity and severity of what's going on. So, I would suggest that availing ourselves of all of all that work is important.

REP. FERRARO (117TH): Okay, I thank you very much for your answer, thank you, Mr. Chair.

MICHAEL HARRIS: You're welcome.

SENATOR NEEDLEMAN (33RD): Thank you, Representative and thank you. Somebody's got a bird in the background, I think it keeps chirping periodically. I want to remind everybody that we are really now, we're almost four o'clock, we still haven't gotten halfway through our list, and I would really want to hold to the three minute rule for everyone, so please let's keep this as short as possible, even if you have written testimony maybe just talk about it for a minute or two instead of reading the entire thing that might be a little bit easier, also for all of us to understand it and Will, who is next.

WILL GINN: Next is Dan Allegretti followed by Representative Nuccio.

DAN ALLEGRETTI: Chairman Needleman, Members of the Committee, my name is Dan Allegretti. I'm the national spokesman for the retail energy supply association where the national trade association for competitive electricity suppliers and we are opposed to raise Bill 6526. I want to draw your attention in

particular to two provisions that have a great deal of concern to us. The first concern is price regulation. It's contained in section 4. It grants an unprecedented amount of discretion to the PURA. For the first time, be able to impose price regulation on the competitive retail electric supply market. It gives them the ability to exclude suppliers from the market, all together, if a supplier has failed in their view, to prove that they are not overcharging or otherwise, offering a product harmful to customers and while we certainly don't propose that our member should be allowed to do those things.

This is a standard that is completely unmoored in in any regulatory law, in any body of law, it's entirely subjective and I would also point out that it's a one-way form of regulation, a traditional utility price regulation is a two way street. It prevents utilities from over earning, but it also protects them from under recovery. It gives them an opportunity to recover expenses and stranded costs, even if they're in the past or need reconciliation. In the competitive market, when we put a price in front of a customer, we have to stand by it.

We have to supply electricity at the price that we have offered, and if that means losing money, it means that we're going to lose some money in the process. But that's the nature of a competitive market. Our prices are disciplined through the competitive marketplace. If customers feel we're charging too much, they are free to move to another supplier, pack the standard offer that is the appropriate remedy. We also have an issue with the section concerning auto renewals. Our services is a subscription, people subscribe to electricity, like Internet service, natural gas, water, cable television and while we certainly recognize the obligation, we have, the legal obligation we have to provide notice in time we change terms and conditions. This legislation would go beyond requiring notice and offering customers, the chance

to switch. It would effectively require that the customer be dropped. Unless they take some affirmative step to re-enroll to go through the process again, this is a low aggravation hassle that the customer doesn't want to see.

It's not the burden it imposes on us; it's a reaction that will bring some customers, that is of great concern to us. Bodily raising competitive retail electric markets and we've come a long way. I would note that since 2014 that our complaints against suppliers are dropped by over 90%. We have significantly improved and advanced as an industry, and we are very committed to retail markets, I was heartened to hear Commissioner Dyke say, that a strong commitment to open, competitive processes is DEEP policy and that we should not abandoned competitive markets. There are a lot of issues in this Bill. I certainly happy to spend time discussing them with the Committee and I invite your questions, thank you very much for your time and attention.

SENATOR NEEDLEMAN (33RD): Thank you, Dan Representative Ali-Brennan.

REP. ALLIE-BRENNAN (2ND): Thank you, Mr. Chair. Thank you, Mr. Allegretti. Quick question; there was a lot of conversation when Chairwoman Juliet spoke about rates on the notion that the only reason a customer chooses supplier is to save money, I guess, my question is, you know why should we have a retail market, if customers don't always save money.

DAN ALLEGRETTI: It's great question. It's when I get another jurisdictions as well. Certainly, sometimes you do and sometimes you dump depending on the on the contract you commit to but there's a lot more to it than that and I am old enough to remember when we introduced competition in telephones, it was all about saving money in cents per minute on your long distance Bill. Today nobody sells telephone by cents per minute, there's no distinction between



local and long distance and the innovations with iPhones, smartphones, GPS, streaming that the things we get are well outside the scope of imagination of AT and T in the 1970s. The thing about competition is that it drives the level of innovation and we've seen that in the business-to-business end of the market, where customers are suddenly engaged in managing how they use electricity, how they generate it, how they buy it, where they buy it, where it comes from. There are a lot of dimensions to this that are just now filtering down to the residential customers.

I think it's very important for Connecticut to remain competitive and to stay the course and make certain these kinds of innovations come to Connecticut customers as well, so I think I think there's a lot to be gained by staying the course on competition. Can we improve it store? There are things we can do better, but I think some of the provisions in this Bill are very concerning. Thank you for the question.

REP. ALLIE-BRENNAN (2ND): Thank you, thank you, Mr. Chair.

SENATOR NEEDLEMAN (33RD): Thank you, Representative and thank you, Dan. I don't see anyone else with their hand up. Will who's next.

WILL GINN: Representative Nuccio, followed by Richard Hart.

TAMMY NUCCIO: Hello sorry, excuse me, my dog is barking in the background. I'm trying to hush her but she's not doing it.

SENATOR NEEDLEMAN (33RD): Never works.

TAMMY NUCCIO: I'm sorry, somebody just rang a bell somewhere, and you know she heard it. Welcome to working at home. Good afternoon Co-Chairs, senator Needleman, Representative Arconti, Ranking Members,

Senator Formica and Representative Ferraro and all the Distinguished Members of the Energy and Technology Committee. I'd like to thank you for the opportunity to submit testimony in support of House Bill 6522, an act concerning in electric generator reimbursement program. I am here to obviously support the Bill. I learned a lot over the last few years, being an elected official regarding the needs of my constituents. Over the years, there have been many instances when we've had storms and I've had hundreds to thousands of residents lose power we've talked about those storms, a lot today.

The three towns that I represent our Ashford Town in Willington and all three towns are rural towns. Very few of my residents have access to city water or sewer. The overwhelming majority of what we have out here is wells and septic tanks, so when the power goes out, we lose water accessibility 100% and I don't think that you can get much worse from a public health perspective to not having access to water. With the last storm, I was shocked to find out that Eversource that while Eversource has a list of people who have medical conditions they do not do anything with it. It doesn't come into play regarding restoration of power and it doesn't come into play for warnings or advanced notice that somebody should be preparing for a storm. Truly I'm not sure what the list does for either the power company or for my compromised and vulnerable residents. The recent legislation regarding Eversource to give an allowance for medicine and food is a nice gesture, but it's reactive rather than proactive.

So, what I've proposed in this legislation is a proactive measure, and I thank you again for raising it to public hearing. You've got a lot of heavy things on your agenda today, so I don't think it's going to get talked about very much this might be my only opportunity. The legislation would establish a program that would assist in the cost of a generator for people with certified medical conditions that

require electricity for their health and wellbeing. If you have a medical condition that requires you to have electricity, a generator is a necessity and not a luxury. Having an electric generator reimbursement program would help to enable this group of individuals maintain lifestyle, lifesaving power, even if it's just for the few machines that they may need and it would also mitigate the expensive wasted food and medicine from the last piece of legislation for the power company, so it would be an either or. I think it's a very valuable thing if we could do something like this, and I thank you for allowing my testimony today in your consideration of this Bill overall.

SENATOR NEEDLEMAN (33RD): Thank you, Representative Nuccio.

TAMMY NUCCIO: You're very welcome.

SENATOR NEEDLEMAN (33RD): Representative Cheeseman, as your hand up.

TAMMY NUCCIO: You are unmuted.

SENATOR NEEDLEMAN (33RD): You are unmuted.

REP. CHEESEMAN (37TH): The dogs barking there, I've got two in the balcony. There they go.

TAMMY NUCCIO: Is it barking for mine.

SENATOR NEEDLEMAN (33RD): Your dogs on the zoom calls going to start barking.

TAMMY NUCCIO: They're all going to start barking.

REP. CHEESEMAN (37TH): How many residents of Connecticut will supply to you, do you have any idea.

TAMMY NUCCIO: I'll be honest with you, I don't, that's part of the problem is, as I mentioned

there's Eversource has a list that they can maintain of people who are medically compromised, but it doesn't nothing, nothing gets done with it, so I know, in the last storm I probably had in my town a pretty steady, a pretty steady influx of emails just from one of my three towns, because I wasn't Representative of the other two at that time, but just in town, I would say, we had about 20 to 40 people who had medical conditions, who were struggling, they're out of power, for a long time whether it's CPAP machines, you know climate control, we had children who have issues with seizures and temperature and stuff like that and just not having electricity for that long period of time is, if we had the availability to have some kind of program where we could assist in the cost of a generator that even just kept a few rooms, going so they had electricity in those rooms, I think it would be very beneficial.

REP. CHEESEMAN (37TH): And I know the utilities typically contact you to find out if you have some medical issues, so you would need backup power, so there's probably a way to find out, so thank you all go now, so the dogs don't disrupt me. Thank you.

SENATOR NEEDLEMAN (33RD): Thank you, Representative Nuccio. Just is a point of clarification, I believe Eversource does have that information, its collected on a voluntary basis, and it is released to the emergency management and health department and people in the towns in the event of a storm.

TAMMY NUCCIO: Yeah, we are pretty familiar out here with the people who have it. Our fire chief is great with keeping up like the families and we go out and we contact them. What I was really astounded, though, was that there's, there's no urgency put on getting power back to those people well, when we were talking with our person at Eversource, I was involved in the conversations, as the chairwoman of the town council. So, we were having a lot of conversations back and forth. We had, unfortunately

we had one resident whose daughter has a lot of medical, medical compromised issues and they were the last road to get power and it wasn't even like a big thing that they had to do, but they weren't considered a priority, because it wasn't a big thing that they had to do to repair the power, so that's what we kind of found out that there's a list, and they have the list and it's then given back to like fire and EMS but it isn't used in anyway whatsoever to kind of prioritize getting power back to people who have medical, medically compromising issues.

SENATOR NEEDLEMAN (33RD): It is not, and thank you, I know that. So, it's complicated and it's good that we have first responders in all of our small towns that do that.

TAMMY NUCCIO: Yeah. I'm very grateful for them.

SENATOR NEEDLEMAN (33RD): It's critical, so thank you. Will, who's up next.

WILL GINN: Up next is Richard Hart, followed by Kevin Kelly.

RICHARD HART: Good afternoon, Senator Needleman, Representative Arconti, Ranking Members for Formica and Ferraro. My name is Ric Hart. I represent the 4000 career firefighters for the uniform professional firefighter's association in Connecticut. And I'm here to speak in support, strong support of Senate Bill 937 an act I'm wearing two hats today, one is the lobbyist for the UPFFA but also as a deputy chief shift commander, who is on duty August 4 when tropical storm Isaias struck.

And you have my written testimony that talks specifically about the three sections of the Bill that were most concerned with the makes a cruise the liaison and the planning aspect of Eversource is preparation for and you guys preparation for natural disasters. At approximately 3 o'clock in the afternoon of August 4, we had in City of Waterbury

124 calls holding for our Fire Department to respond to that we could not get to because we are out chasing down wires, trees on wires, etc. It's an extremely dangerous situation not only on the fact that there are live wires in the streets, but also it takes the vital resources of the fire department and police department away from other more pressing emergencies.

By establishing make safe crews, based upon population and infrastructure within the municipalities across the state that would greatly reduce resource usage by fire and police. At that time, we had absolutely no fire protection in the city, because we were out babysitting wires and this happened in 169 towns across the state. I feel that the planning aspect of mandating that Eversource has to plan for a category three hurricane, is very valuable because, even though the tropical storms does not reach that level of intensity, it does allow them to scale back their, their response and their planning and also the invaluable resource of a utility liaison would be an extreme help to the municipalities and interacting between a resource and emergency operation center. With that I'd be happy to take any questions.

SENATOR NEEDLEMAN (33RD): Thank you Ric and thanks for your service by the way.

RICHARD HART: Thank you.

SENATOR NEEDLEMAN (33RD): I'm not seeing any question, David, Rep. Arconti.

REP. ARCONTI (109TH): Thanks for your services and always to the state in the city water. Are you guys also participating or did you participate in the public comment period with the storm investigation or grab pure as well.

RICHARD HART: I believe we submitted testimony.

REP. ARCONTI (109TH): Perfect.

RICHARD HART: And it was, it was actually, actually the Joint Council of fire service organizations, sent a testimony and on behalf of that.

REP. ARCONTI (109TH): Thanks Mr. Chair.

SENATOR NEEDLEMAN (33RD): Thank you, Representative Arconti and thank you Ric.

RICHARD HART: Thank you.

SENATOR NEEDLEMAN (33RD): Will, who's next.

WILL GINN: Up next, we have Kevin Kelly, followed by Jeffrey Macel.

KEVIN KELLY: Good afternoon, Chairman Needleman, Chairman Arconti, and good afternoon Committee Members. My name is Kevin Kelly, and I represent the Tree Wardens' Association of Connecticut like the offer the following comments I proposed Bill 950. It's our opinion that this Bill contradicts the intent of Connecticut general statutes 23-59 of which describes the powers and duties of the tree wardens that are appointed by municipalities to have care and control of all the trees and shrubs and the public right away. And Connecticut general statute 16-234, which is the legislation that allows utility companies to conduct vegetation management, but it also offers protection of property to the budding property owners from the discretion of what the utilities determine is needed to be removed.

As stated in the proposal, Bill calls for the reappear, repeal of Section 3 subsection E and removes the ability of property owners to object pruning and removing. Additionally, in the statement of purpose, the Bill states that the only intention of this is to satisfy time restraints and expedite the removal process. Unfortunately, the permission process takes time and by law, the public is allowed

to have a voice. This Bill removes the responsibility that the municipal tree wardens have, which is to act as Representatives of the towns and the residents that they serve. There are, they are public officials that are often needed to act as an intermediary between the utility companies and the property owners and must not be excluded from the process as a matter of convenience.

Qualified tree wardens are professionals in their field and have extensive education in the protection maintenance and care of the urban forest. I support for all concerned that the checks and balances put in place by the legislator are preserved and that the rights voices of property owners are protected. Eversource reached out to our board of directors yesterday. We met to voice their opinions about our concerns. We've always worked on maintain a partnership, work alongside the utilities and managing the roadside force. We suggested public education as an answer to their problem of lack of cooperation with the public and offered our assistance in achieving this task.

It's our opinion that the public tends not to want to cooperate, due to the past experiences they've had with utilities in their practice. Recently UI try to get around the same issues with their targeted risk management program and PURA ruled against them due to the public comment. We don't feel that the utility should be allowed to change language of the statue. Tree warns association of Connecticut would like to offer these comments in opposition to Bill 950. I take any questions. Thank you, by the way, let me comment today.

SENATOR NEEDLEMAN (33RD): Oh, of course. Thank you so much, and I think there's confusion, the language is not what will, will be or would be the final language, no one, especially me who has a tree warden who works for him would want to ride over their tree warden and give the utility authority to not work within that framework. I think that, 10



here is that on certain major circuits where individual trees can cause disproportional problems in terms of the number of outages that they can cause, I think that, having the tree warden be more than mediator and the more final word, which is probably back to the way it was before 2014.

At least on those circuits is probably the right approach, so there's no intent to eliminate the tree wardens from the process, if anything, it would enhance their authority to be the final arbiter of some of these things and give them a little bit more authority to make sure that we keep the power on and we keep people safe that you know, as in my, forgot how many years now almost 10 years of being a first selectman and eight years of being a selectman, I've witnessed where one individual like the person I live with, for example would strap herself to a tree before she allowed it to come down. When I know that a tree could take out an entire circuit.

We need, you know we can expect the utilities to deliver resilience if every time one individual wants to take it to PURA slows it down by months and multiply that by 1000 or 2000 or 3000 people, we have to have a better process, I'm open to any suggestions here and I suspect that the utilities are also, I want to hold them accountable, but I also know that a big part of the problem with outages come as a result of trees during storms, so we need to do something. Your help in this is incredibly valuable so.

KEVIN KELLY: We recognize that too, and, as we stated to Eversource yesterday, we want to work with them to achieve their goals, but we have to realize that you know, there is a process in place and it's there for a reason so.

SENATOR NEEDLEMAN (33RD): That that process was amended recently, and I think it may have gone a little bit too far on the pendulum, so we need to find a midpoint there that gives us some

flexibility, gives the residents of every town all the rights that they're entitled to, but it may take some of it off the hands of PURA who deals with a lot of these cases and you know that when you're called about removing clearing trees in a neighborhood, this one tree will be bypass and it'll be let go because they follow their schedule, so when something holds it up, they don't come back until they get cycle to that neighborhood again, which could be years later, so we need to do something. I don't have a specific answer yet, but I'm happy to work with the tree wardens' association on this.

KEVIN KELLY: Okay. Thank you for letting me comment.

SENATOR NEEDLEMAN (33RD): Thank you so much. Will, who's next.

WILL GINN: Up next is Jeffrey Macel followed by Representative Michelle.

JEFFREY MACEL: Great. Thank you very much Chairs Needleman and Arconti, Vice-Chair Allie Brennan, Ranking Members for Formica and Ferraro. Thank you very much for your time today and for your service to your constituents and to the state of Connecticut. We appreciate it's a long day and we're grateful. My name is Jeff Macel, I'm one of the founders of lodestar energy. Lodestar energy is a renewable energy company headquartered in Avon, Connecticut. We are market leader in the development of renewable energy solutions and energy storage facilities. In Connecticut Massachusetts and New York, lodestar has developed over 100 megawatts of renewable energy and energy storage assets, but we're not only the developer of the, of these assets, but the long term owners and operators of these assets.

As an employer in Connecticut, we provide high paying professional and skilled jobs and due to lack

of long-term policy design, our growth has been significantly hindering. As you may have heard earlier of those hundred megawatts, 20 are located in Connecticut while 80% of our businesses outside of the state. We're excited about the opportunity to continue to shape Connecticut's environmental business and energy future and our comments on Senate Bill 952 will help shape the appropriate policy to enable additional opportunities in Connecticut both environmentally and economically.

Lodestar supports the overall aspirational natures of Senate Bill 952 is encouraged by the inclusion of directives on establishing a program for energy storage deployment. As you heard earlier, we recommend the amendment section four with regard to the virtual metering caps for two years to remove it entirely. More importantly, however, we also think that, as a matter of general policy, it's important to note the challenges, EDC as a base in the past decade, ensuring the reliability of the grid and therefore recommend that the Committee does not enlarge footprint services given to the EDCS under their current monopoly. This rationale supports the deletion of section six of the Bill for the affordability to rate pairs. We recommend all energy storage, whether owned by the EDCS or privately should be awarded through the competitive procurement under section 2 and 3 of proposed Senate Bill 952. This should be done in a singular procurement or process. We believe ownership and operation of energy storage falls outside of the core functions of the EDCS. Energy storage is both a load and the generation on.

WILL GINN: 30 seconds.

JEFFREY MACEL: Both the load and a generation on grid. Therefore, energy storage should not be rate based under any circumstances. Finally, we take notice of recent action by the legislature under the take back the grid act and this Committee is affirmative vote on Senate Bill 855 this week. We

encourage the focus of this Committee to optimize outcomes for ratepayers and lowering the cost of electricity and ensuring the reliability of the grid. As an overarching matter, we believe that any actions by this meeting to ensure independence of PURA, DEEP, and Connecticut's policy from the interests of the EDCS will help further the objectives of lowering electricity costs and grade reliability for rate there's and your constituents.

For this reason, we believe any future assets that are added to Connecticut's grid must be overseen by PURA independently, pursuant to the policies promulgated by DEEP and consistent with legislation approved by this Committee and inactive by the legislature. Will submit a copy of this written testimony and attached to it will be exhibited setting forth, the value of distributed energy reports and demonstrating the 14.1 rate versus the 11.5 and also submit the materials requested by Senator Moskowitz.

REP. ARCONTI (109TH): Thanks Jeff. I appreciate your testimony.

JEFFREY MACEL: Thank you, Representative Arconti.

REP. ARCONTI (109TH): Any questions for Jeff. Seeing none, thanks and I'm sure we'll be in contact in the near future, Alright.

JEFFREY MACEL: Great. Thank you so much, Mr. Quick.

WILL GINN: Next up was supposed to be Representative Mitchell, but it doesn't look like he's here so we're going to go with First Selectman Bowsza.

JASON BOWSZA: Good afternoon, Senator Needleman, Representative Arconti and Distinguished Members of the Energy and Technology Committee. I want to thank you for the opportunity to provide comment today on Senate Bill 952. I did submit written testimony but

I'd like to speak about three sections of the Bill and just kind of provide a summary. Those are sections four, five and 10. Section four seeks to extend the CAP on virtual net metering solar projects from 20 million to 30 million. state incentives like virtual net metering credits have been successful used to encourage solar projects in Connecticut but East Windsor's experience with being on projects has been mixed. Several years ago, a solar project approached my town seeking our support for their projects, claiming that this would be a quiet, quiet neighbor a large taxpayer and decided on a former landfill.

Very shortly after being cited they turned around and brought a lawsuit against the town claiming an exemption for personal property taxes under 12-8157D of the general statutes. It is vacated a large portion of the anticipated property tax revenue that was from the sighting process. I offer this example because it highlights that the VNM credit system is not always working to the benefit municipal, of municipalities, as may have been intended. I urge the Committee to consider the following remedies to ensure that any host community benefit from citing projects without any negative financial impact. One, require all the VNM projects to enter into a tax stabilization agreement with the host community.

Two remove the exemption from personal property tax outlined in 12-8157D or require power generated from the grid scale solar development be sold to host So that was our, that was one of our experiences, conversely, East Windsor is about to become home to the largest grid scale solar development in New England once gravel pit solar is operational. Here, our experience has been completely different. This company has been a partner to the town and I attribute that to having a tax stabilization agreement in place. I also want to raise a concern about section five of this Bill, this section seeks to require a percentage of VNM projects be located

in communities identified as alliance school districts. My community is one such town.

This is only beneficial to the host community if they are able to enter into a PPA or if they have a stabilization agreement, otherwise these projects are less beneficial to towns and I think it's intended. Many, if not most of these projects are in small towns. Small towns may only consume enough power to enter into a single power purchase agreement.

If that that is certainly the case in East Windsor, so hosting more than one VNM project without the requirement of a stabilization agreement is not in the best interest of town similar to mine. Finally, I have some concerns about section 10 of the Bill. Expediting permitting of solar projects on farmland is likely to consume more farmland and be in conflict with the state's farmland preservation goals. This section would be better if it was clear that any expedited permitting needed to primarily benefit the farm operation on which it cited.

WILL GINN: I'm sorry. It's time.

JASON BOWSZA: In comments, for the record and I'm happy to answer any questions that any Members of the Committee they have.

REP. ARCONTI (109TH): Thanks. Did use any written testimony, did you submit, is there, in your testimony the changes you outline on the VNM program that you will be more beneficial to the host.

JASON BOWSZA: Yes, Sir, I did.

REP. ARCONTI (109): Great. I appreciate that. That's only question I plan on taking a look at that, over the weekend. Any other Committee Members. Thanks, Jason, for that testimony.

JASON BOWSZA: Thank you very much.

REP. ARCONTI (109TH): Mr. Quick.

WILL GINN: Up next, we have Mike Farrell followed by first selectwoman Vanderslice.

MIKE FARRELL: Sorry about that can you guys hear me.

REP. ARCONTI (109TH): We could hear you.

MIKE FARRELL: Okay. Thank you. Well, thank you for allowing me to speak briefly here today, I'm going to try to keep it very brief. I am Mike Farrell from Trinity Solar, we were one of the leading solar energy residential, solar installers in the state, we currently have well 14,000 Connecticut customers, I want to speak briefly, if I can on raise Bill 951. First largely consumer protection driven, you know we're certainly, we're certainly in agreement playing by the rules with consumer protection everybody wins for doing it right. If I could just touch on two key points initially, the first being the hours of available, hours available to solicit the line number 28. It asks for a cut off time 6 P.M. and feel that it would be harmful at seven months out of the year.

It would cut into a prime time for us for, for marketing for, for door to door where people work, home from work or what have you we're certainly not opposed to stopping for knocking at dark. We have no interest in being out there after dark. But there's other ways to look at that there's sunrise, sunset, calendars what have you are available, but simply marking this off at 6 pm would be would be harmful in our opinion. The next piece on this starts around line 36 and that's providing a list of, a list of our employees or mark your staff to share on an annual basis, currently our sales REPS are door to door REPS are registered through the state under the home improvement salesperson registration processes. Hundreds have got employment requirements that are

that are out there from nurses to electrical licenses, you mean there's already a process in place for that.

We subscribe to it, we have dedicated staff that handles these and you could add to it for the solicitors that may be a better a better place, not everybody that's knocking doors, I want to be clear on this. Not everybody that's knocking doors is writing contracts, so they're not obligated to have that salesperson registration. We could we could work on that collectively. But, more importantly, my final point on this be that you know we're not opposed to the consumer protections that they're looking for, we would prefer some open dialogue moving forward to make this workable for everybody, where the consumer protection side of it is covered and were able to effectively conduct business in get things done the right way. Hope that was brief enough for you.

REP. ARCONTI (109TH): Thanks Mike. Thanks for your testimony. Any questions from Committee Members, being done. Thanks, Mike.

MIKE FARRELL: Thank you all.

WILL GINN: Next, up is supposed to be First Selectwoman Vandereslice, but she is not there, so we're going to go with Kevin Barber next and that's going to be followed by Edward Levene.

KEVIN BARBER: Chairs Needleman and Arconti, Ranking Members, Formica and Ferraro and Members of the Energy and Technology Committee, my name is Kevin Barber. And I'm the general manager of the Third Taxing District; I'm in municipal electric utility serving 4300 customers in Norwalk. I also currently serve as the chairperson of the Connecticut municipal electric energy cooperative board of directors. Thank you for the opportunity to testify, today. I would like to focus my comments on section



seven of the Senate Bill 952, AN ACT CONCERNING CERTAIN SOLAR ENERGY PROJECTS.

As a member of CMEEC, TDD purchases all of its power supply requirements from CMEEC, who meets these requirements through a combination of purchases through the ISO New England markets and CMEEC member own resources, those, including renewables neither TDD nor any of the CMEEC members receive its power supply using the Eversource or united illuminating distribution systems.

And we receive no part of our power supply through any of the state sponsored purchase power agreements. If the provisions in section seven, subsection one were imposed on TDD, it would mean that the cost of these large scale PPAs would be passed on to ARC ratepayers, even though they receive no benefit from those PPAs. For this reason, TDD as opposed to this provision that would require DEEP to submit a report to the Committee, with recommendations to spread the cost of these large scale PPAs to municipal utilities. I also express my opposition to section seven, subsection two, which would require DEEP to submit a report to the Committee, with recommendations to impose the system's benefit charge against municipal utilities.

TDD currently has locally driven initiatives that are in part, funded by TTD ratepayers through a statutorily required 2.5 mil assessment on their electric Bill. Examples of these initiatives include a commercial and industrial lighting program, cool choice rebates program, heat pump water heater rebate program, addict installation rebates program, home energy savings programs, incentives for the installation of solar power and as an example TDD provided full funding for the installation of a 40 kW solar and battery storage project, on the district own East-North library and customers assistance programs. One example as TDD partners with a local nonprofit to provide financial assistance and education to our customers in need.

As you can see TTD is focused on promoting energy efficiency conservation and renewable, all while meeting the needs of our customers. The server would largely be duplicated under an additional SPC charge contemplated by this proposed legislation. I would like to ask that you refer to my written testimony for additional information and I'd be happy to answer any questions you may have.

REP. ARCONTI (109TH): Kevin. Question on, so in the municipal territories, I can see your point on the SPC charge that I do, that you, administer to the utilities operate their own, energy efficiency program, so I am happy to hear that, but the ratepayers in your territories, they don't, there's no charge in regards to the renewable energy investment charge, which is the portion that goes to fund the Connecticut electric energy fund, which is the Connecticut Green Bank and I know the Green Bank, you know will still do projects in you know territories that are run by the media utilities. So maybe you know as language is needed to very specify the, that charge specifically maybe I guess I guess I'd like to get your thoughts on that.

KEVIN BARBER: Sorry. The one thought is, I'm not aware that our customers are allowed to access funds from the Green Bank, because they are part of the meanies but, to be fair, I may be incorrect on that. I could look into that as well.

REP. ARCONTI (109TH): No, I tumbled; I wanted to be, want to make sure I had that right there, so I did ask the Green Bank about a month ago, just I didn't say anything you know, out of school on that. And then you know, you can, I would argue that your ratepayers do benefit from the grid scale PPAs form of the environmental benefits that are delivered through procuring you know, resources from Millstone and offshore wind and grid scale solar and the reducing carbon emissions, and I know all of our clean energy goals as Commissioner Dykes pointed out

earlier on, you know the state mandated goals, so really the genesis two of these sections in the Bill was you know, to get the municipal to come to the table a little bit more kind of a chance for you know you guys to educate us as Committee Members on some of what you're doing to accomplish what are clean energy goals you know, are in this state we don't get to hear from you guys often, so we that was at least house part of mine, you know genesis for including you know these concepts in this Bill. Because you know you represent 6% I think of ratepayers across the state, so you know, not an incident to get member.

KEVIN BARBER: Well, no that's totally understandable. I hope Dave Meisinger, CEO of CMEEC is following up with a testimonial a while, and I know Dave will touch upon some of the reporting aspects, which CMEEC communities which may actually help meet some of the requirements you're looking for.

REP. ARCONTI (109TH): Okay. Thanks Kevin. I know I Representative Arora has a questionnaire.

KEVIN BARBER: Yes.

REP. ARORA (151ST): Yes, thank you, Thank you, Mr. Chair. Thank you, Mr. Barber, for the -- for your testimony and for taking the time. You know may, may perhaps ask you a similar question as to what, since you do not have some of the mandates, which we, which are bundled in our Bill or in the Bill for the utility provided you know customers, what price do you come out at in the end, what is the average price of your customers in that 6% of the ratepayers in Connecticut.

KEVIN BARBER: I want to look up that information, so I don't miss state that.

REP. ARORA (151ST): Approximately plus minus.

KEVIN BARBER: I'd say I know TTD, it's about I think it's about 8%, 8 cents.

REP. ARORA (151ST): For energy and what about distribution.

KEVIN BARBER: Oh, your total all in cost.

REP. ARORA (151ST): Yeah.

KEVIN BARBER: Our total all in, I got you have that very quickly. We're at about 16 cents.

REP. ARORA (151ST): Thank you. That's, that's all I needed because you know, one of the things we are trying to figure out and you would have gathered from many conversations today, is what is the part of the Bill, where we are at 24 cents pretty much across the straight at 23 cents. What is the part of the Bill, which is stuff, which maybe we might have you know, and I, you know as a part of the legislator I, I, I calm myself in it.

We might have inflicted upon ourselves, and we definitely don't want to, we want your customers to stay at 16 not put any more mandate, we want to bring our customers, other customers bringing, the rest of the state to you, rather than bringing, you bringing, bringing you to the rest of the state while encouraging market based development, so I really had that question, and I think the Committee can see it clearly how you know letting, letting different folks do different, this is the idea of competition, which makes our country great and our country works which is different entities doing working competitively work out different solutions, some of them are just fantastic and brilliant provide brilliant solutions for their customers and I thank you for doing that for your customers and Eversource and others whoever, you know across the state that similar cost effective model is followed.

We really want to control these prices that's a mandate, we hear clearly in terms of affordability from our constituents. Thank you once again, and thank you Mr. Chair.

SENATOR NEEDLEMAN (33RD): You're very welcome you. Any other questions. Thanks Kevin.

KEVIN BARBER: You're very welcome, thank you very much.

SENATOR NEEDLEMAN (33RD): Will, next.

WILL GINN: Next up, we have Edward Levine followed by David Meisinger.

EDWARD LEVENE: Thank you, Chairman Needleman, Arconti, and Ranking Members, Formica and Ferraro and Members of the Committee. My name is Edward Levine. I am CEO of Clean Peak Energy Group. We are based in Stamford Connecticut testifying today and supportive raise Bill 952. Our state and the regional grid system will need significant quantities of energy storage to manage the intermittent nature of the increasing quantity of solar and wind generation. Increased energy and increased energy storage systems are required for the grid system and we recommend the Connecticut state legislature for evaluating legislation to increase energy storage systems and fostering the sustained and orderly development of a state based electric storage industry.

There are multiple solutions for energy storage as contemplated in the legislation and they're all desirable outcomes for the ratepayers in our opinion for the state of Connecticut. However, section five we are concerned, adding 150 megawatts of assets to the distribution companies is may not be the right way to manage the grid system for ratepayers. If \$300 million dollars are invested by our electric distribution companies to build 150 megawatts of solar at a 10% rate of return that's a roughly a \$30

million dollar per year added profit to the utilities on calculating \$600 million dollars over 20 year period, if they are allocating additional stock APP to acquire those facilities. We propose those solar facilities go out for competitive bid to allow all not particularly not the utilities to participate and bring in the lowest cost solution for ratepayers. Additionally, the state does need more solar and wind generation and energy storage solutions to meet our net zero environmental goals.

There are qualified experience funded and interested entities that desire to invest capital into Connecticut to assist in achieving the goals without rate pair risks. Attached with my testimony is language that allows for the construction of shared energy merchant facilities, without any fiscal note or ratepayer risks. In fact, the legislation guarantees ratepayers will save money, compared to standard service and associate with solar, wind or storage facilities constructed in our state. The legislation even addresses the issue of cost to shift, which has been a concern of the Committee. The legislation has private capital, taking all the risks, adds jobs to our state, advances our environmental policy, allows consumers of electricity in Connecticut without their capital expense to save money on their electric Bills and encourage the production of Connecticut renewable generation facilities and energy storage. I'll be glad to answer questions that there may be regarding any provisions of the proposed amendment, thank you very much.

REP. ARCONTI (109TH): Senator Needleman.

SENATOR NEEDLEMAN (33RD): Thank you so much so, and I just wonder, you mentioned about the utility on solar, do you care if they're part of the bid.

EDWARD LEVENE: I would propose that the distribution entity, the EDC should not participate, I would say that it, as we did before, when we

deregulated the electric industry in Connecticut 20 years ago now, the holding company for the utility had a subsidiary they called select energy that was an entity that the risk of loss went back to the stockholders of the holding company. I felt that is a more fair way to attempt to balance the risks of that entity with the private market and also open up into competition, so we can drive the most effective costs for ratepayers.

SENATOR NEEDLEMAN (33RD): Well, obviously we want the most effective cost, so a similar arrangement to what they have with Orsted where it's a separate entity for profit, not under the regulatory framework.

EDWARD LEVENE: Correct and do we have to also be concerned that there aren't commingled costs. You know, as sometimes we share utility personnel, you know focus on making sure that those costs that are allocated are fair and appropriate so sometimes hard to do so, I it adds concerns to me, but it raised a, an area of concern of significant concern.

SENATOR NEEDLEMAN (33RD): Understood. Thank you that's my only question, Mr. Chairman.

REP. PETIT (22ND): Thank you Mr. Chairman. Actually, Senator Needleman took my question, which is great, it's been answered, but Mr. Levine you said there were, I figure testimony or there's an attachment may be that have been helpful perfect AIC, just a couple of pages of testimony but no attachment were to be listed under some other name.

EDWARD LEVENE: For the attachment for the proposed amendment, it should have been filed, I filed it the other night with there, so there were two filings, so hopefully that got through, I am filing you a copy specifically if you have a question about.

REP. PETIT (22ND): I'll check with check with Glare. Thank you.

EDWARD LEVENE: Thank you.

REP. ARCONTI (109TH): Any other questions. Done thank you.

EDWARD LEVENE: Thank you.

REP. ARCONTI (109TH): Mr. Quick.

WILL GINN: Next up, we have David Meisinger followed by Julian Boggs.

DAVID MEISINGER: Good afternoon Chairs Needleman and Arconti, and Members of the Energy and Technology Committee, my name is David Meisinger. I appreciate the opportunity to address Senate Bill 952 this afternoon. I also did submit written testimony yesterday regarding this Bill. I'm the chief executive officer of the Connecticut municipal electric energy cooperative, also known as CMEEC. I've held that position since January of last year. CMEEC is the exclusive wholesale provider for six of the seven municipal electric utilities in the state, and in that capacity, I wanted to touch briefly on three aspects of Senate Bill 952S. Section six of that Bill would require each municipal electric utility in the state to report annually to DEEP on its quantifiable progress toward carbon reduction.

We have no issue with that concept. I just wanted to note that substantially equivalent reporting requirements already exist under applicable and existing state statutes and CMEEC, CMEEC coordinates those filings on behalf of our six municipal electric utility members, and so, if that additional reporting requirement is considered necessary, we would just ask respectfully that language be added to permit CMEEC to file a combined report on behalf of our six members. And we'd be happy to work with the Committee and or DEEP on to that effect, on language to that effect. The second aspect of the Bill I'd like to address is section seven,



subsection one, which asks DEEP to report, to submit a report to this Committee on recommendations to spread the cost of large-scale power purchase agreements to municipal utilities.

We do oppose that provision, because we believe it would be unfair to those, excuse me, costs on our consumers for energy that they don't use or consume. The EDCs procure that power at wholesale and they recover the cost of that power through PURA approved rates because they're ratepayers actually consume that energy. On the other hand, our municipal electric utilities do not accept delivery of any of that power and their retail customers do not consume it, which is essentially by design and a result of the enabling legislation behind CMEEC whereby, as I said earlier, where the exclusive wholesale power provider for our municipal electric utility members and in that capacity, we engage in long term planning and procurement and already have a vibrant power supply portfolio and are not really scaled to take on additional resources or power purchase agreements normally again things should, we should be paying for costs for power that we don't consume.

Final aspect of SB 952 I'd like to touch on briefly is Section 7, Subsection 2, which would have DEEP submit a report on taking the statutory system, I'm sorry, yes system benefits charge that's currently applied to EDCs and also applying it to municipal electric utilities. We oppose that as well, primarily because our municipal rate peers already pays substantially identical surcharge again under existing state law that's already on the books.

We use those funds for various initiatives and projects that are formed under local direction from our communities in order to advance clean energy projects, load control hardship programs and energy efficiency in conservation are large, are substantially similar to those that are funded by the SPC for the EDCs, and so to impose this upon our ratepayers would really be a second layer of an

extra surcharge and again for the second part for programs, we don't participate in. So those are my comments. Happy to answer any questions and again appreciate the opportunity to testify regarding SB 952.

REP. PETIT (22ND): Thanks Dave. I appreciate the testimony you know it would it be appropriate, do you feel that fear ratepayers to make contributions through the Green Bank, to the Green Bank through rates as the rest of the territories do in the state considering Green Bank services, the whole state.

DAVID MEISINGER: Well, are the municipal utility, electric utility ratepayers do not participate in those same programs, and so I think, if, if we were participating in them, I think it would be appropriate for funding, but as I said earlier, we have a substantially similar surcharge that's actually embedded in CMEEC enabling legislation and based on that, there are six municipal electric utility members impose a surcharge, just like the EDC do you on, on retail customers. That when he comes in, it's used for programs that are you know, buy in large generally similar to, or at least directionally you know going after the same types of benefits as the Green -- the Connecticut Green Bank; so, I think what we've come up with our own programs that work well, based on the input we've received from our communities and we fund those.

At least in part from the surcharge that we collect as required by state law, so I think there's a parallel set of provisions that are already there, we're following them, we're putting programs into place, we're happy to continue to report on those and I just think there's already a parallel program in place, there's no reason to pull us into the Green Bank and make us pay for that again, unless I would say, unless we decide or some of our members decide that they want to directly participate in the Green Bank funded programs.

REP. ARCONTI (109TH): Yeah. I wouldn't want to pull you into the Green Bank, it's my understanding and I'll be happy to be proven wrong that the Green Bank does, you know do projects in the territories, so right if they're doing projects there, I think it's only fair if the right pairs contribute and then so, on my you know same point as with the last speaker. The ratepayers in the territories do benefit from the state mandated climate goals in the environmental policies and the environmental benefits that are large scale PPAs provide. So, you know, part of the idea with the reporting is to make sure that our municipal utilities are also pursuing the same environmental and climate goals as laid out in state policy.

DAVID MEISINGER: You know, I'm happy to address those first of all, again on the Green Bank projects I'm not aware of any of our Member utilities directly participating in any of those projects. So, we can we can talk offline on that or we can both double checks, but again, to my knowledge, there they're not actively participating in those to the extent that we have similar programs around you know conservation load management, load control, hardship programs, raising fund in just separately by the municipal electric utilities or funded in part by that surcharge that again we already impose or there are member utilities and pose it to retail level, as required by state statute.

Regarding the PPAs, I guess, I would just say you know, again as I outlined some examples in my testimony, but obviously we're you know 4 or 5% of the state, total retail load, but we go out and do our own programs as well, when it comes to decarbonization and procuring power that's not just, you know that's not fossil fuel that's carbon free power. So we've got our own projects, we have PPAs that we're funding, we're paying for we're not asking for the EDC to contribute to that and that is and that's again following the sort of the Home Rule or local control aspect of what governments

municipal electric utilities, which is a very different legal and regulatory regime than what the EDCs have so, you know, again we don't we don't accept that power, we're not using that power and you know, but we are accepting and using power that we're paying a premium for it's just under different power purchase agreements that we negotiate ourselves.

We're paying for those and those are efforts that we're taking to show progress and actually make progress toward decarbonization goals at the state and federal level and again we're more than happy to report on that. You know in any reasonable format, I think, but when you start talking about imposing costs for programs or power that we're not purchasing or participating in that's where I guess we stand up and say that doesn't seem fair.

REP. ARCONTI (109TH): Representative Mushinsky.

REP. MUSHINSKY (85TH): Thanks, Mr. Chairman, I want to ask the witness because my town of Wallingford is a municipal utility but we're not CMEEC any longer, so if we use your suggestion and have the CMEEC folks report in the group that leaves out my town, which probably should also be doing a report on environmental and climate goals so, I'm asking if you language, if you're robust reporting, as a group that's fine, but we should not eliminate Wallingford from reporting, since they are also municipal utility that's my first question.

DAVID MEISINGER: Well I think you're if you're addressing section six, I would just say that I don't disagree with you and, as drafted section six would basically relate to municipal utility, municipal electric utilities in the state of which there are seven and my testimony basically was on behalf of CMEEC and the six that are currently members and so yeah I don't disagree with what you're saying we would not be filing on behalf of Wallingford electric division is, they are not

currently a member of CMEEC and so, if you want to keep that laying that provision or remove that provision audit Committee, we're okay with that. We would just prefer to have the option for CMEEC to make the filing on behalf of its members, just because we already do that, that type of reporting and record keeping on their behalf and it's just administratively easier for us.

REP. MUSHINSKY (85TH): And that's why I understand it's easier for you and that's fine I just didn't want you, your language changed to eliminate my utility. So, I want to make sure that they're all reporting, one way or either as a group or individually.

DAVID MEISINGER: Yeah, and we have no objection to that and, as I said, I'd be happy, we'd be happy to work with again this Committee and or DEEP or any other stakeholders on language to that effect.

REP. MUSHINSKY (85TH): Okay, and then in Section seven which deals with Chairman Arconti's concern if we, if you're in the Green Bank and you're using the programs, then you should also be paying for them. Could we make the language conditional that if the municipal is participating in Green Bank, then they would pay and then, if they're not they wouldn't rather than just eliminate them.

DAVID MEISINGER: Again I'm not an expert on everything that that Green Bank does and exactly how the funding that they get from this statutory surcharge kind of plays into the programs, but I think at a minimum if there are programs that and, again, speaking on behalf of six municipal electric utilities that actually are members of CMEEC, there are programs that either some or all of those six utilities want to participate in, I think it makes sense for some costs to be incurred, or to be paid, some price to be paid, I don't know if that's an all a cart thing, and again I don't know if there's, if there's an all or nothing type approach that that

the Connecticut Green Bank takes but we certainly are willing to pay for programs that we actually do use, I think the pushback was a, to my knowledge, at least we're not using any of them and be you know it's parallel track we're already again, collecting a charge from all of our municipal electric retail customers in which we are using for the same types of programs, and again the same underlying statutory purpose as the system benefit charge that's imposed upon EDCs collected from their repairs and use for that you know 95 plus percent of the electric utility customers in the state.

REP. MUSHINSKY (85TH): Okay. Tell me, it's not double, to not double pay the same the same consumers that makes perfect sense but I'm thinking ahead say, they say my utility wanted to do something for a new high school, for example a big project and we wanted to use Green Bank for that, it would make sense for us to pay into it rather than you know get a free ride on the other, utility customer, so that's all I'm saying is not to double not to double Bill, the consumers in the municipal towns, but if they're taking advantage of Green Bank, they should also pay.

DAVID MEISINGER: Yeah and, again, I would just say, from the perspective of our Members, it would, I would like to see a pay as you use or pay as you go type thing I don't want to have to be a full member and pay for, you know 5% of all the costs, just because we use one program so happy to take a look at any type of, you know cafeteria plan or a pay as you go plan just trying to avoid an overall charge for something that really they're not using or maybe using a tiny little percent of and again, especially in the context of the fact that we already have statutory scheme in place where we're again, collecting these funds from our municipal that utility reappears and using them for the substantially identical programs.

REP. MUSHINSKY (85TH): Okay, thank you. Thanks Mr. Chairman.

REP. ARCONTI (109TH): Thanks Representative. Any other questions? Thanks, Dave. We look forward to following up.

DAVID MEISINGER: Thank you very much.

WILL GINN: Next up, we have Julian Boggs followed by Vincent Pace, along with Alan Carey and Digaunto Chatterjee.

JULIAN BOGGS: Good afternoon. Chairs Needleman, Arconti, Ranking Members Formica and Ferraro. Thank you so much for the opportunity to testify today and, and thanks so much for your patience and stamina today taking on so many important topics and issues. My name is Julian Boggs. I'm the state policy director, with the US energy storage association, where the national trade association dedicated to energy storage working towards a more resilient, efficient, sustainable and affordable electricity grid as uniquely enabled by energy storage. We have Members who work in a very diverse group of sides of the energy storage industry, independent power producers, electric utilities, components supplier's integrators and you name it. We also work with a diverse range of technologies, of course, batteries also you know, lithium-ion batteries, which we discussed earlier also compressed air, liquid air, pumped hydro, among other technologies. Fundamentally energy storage systems provide the flexibility to deliver energy at the precise moment and location is that it is needed.

The flexibility can deliver value at all levels of the electricity system, a wholesale service such as resource adequacy, electricity supply, capacity, distribution services, including peak demand reduction, load shifting and increase system capacity and so it's, you know, with all that to say

that we're here in strong support and enthusiastic support of Senate Bill 952 particularly, specifically the energy storage provisions sections one, two, three. Energy storage can deliver a significant savings to ratepayers. The Connecticut Green Bank in their analysis for the ongoing energy storage docket at PURA ran a cost benefit analysis of energy storage program that they would run to deliver 215 million dollars in benefits by 2025.

In Massachusetts which did an in depth, a much larger scale study of potential energy storage in in that state they found in your state of charge report they found that energy storage would yield over \$2 Billion dollars and ratepayer benefits. So, we can see significant benefits through the investment of storage and, obviously, through a commitment from the state of Connecticut to a strong energy storage goal. Just to give you a quick sense of energy storage across the country, we're really in an inflection point and adoption across the United states. Just in quarter four of 2020 alone, so really the last few months, we had more deployments of energy storage capacity than all of 2018 and 2019 together. We are truly a hockey stick acceleration of energy storage in this country, but we see most of that acceleration concentrated in a few specific states and really those are mostly the same states that have invested early in energy storage policy. Seven states Massachusetts, New York, California, Nevada, Oregon, Virginia, and New Jersey have passed targets and we urge Connecticut to join that state.

I just quickly, before I close, I want to offer one recommended improvement in the legislation, which we think that as PURA is required to offer programs to meet distribution energy storage. We also recommend that DEEP be required to offer programs, to offer RFPs to meet that transmission from connected storage. In the current legislation it's may rather than shall; and so, adding a requirement in there would provide more certainty to the industry of



Connecticut's commandments that target and I'll close there and happy to answer any questions.

REP. ARCONTI (109TH): Thanks Julian. Thanks for your testimony, thanks for providing expert testimony on this Bill, in particular, as we try to get this industry up and running here in our state been a great resource so far. I don't see anyone with their hand up. So, thanks for your testimony.

JULIAN BOGGS: Thank you.

REP. ARCONTI (109TH): Mr. Quick.

WILL GINN: Next up, we have Vincent Pace and his group, and after that we have Jordan Garfinkel.

VINCENT PACE: Good afternoon Chairman Needleman, Chairman Arconti, Ranking Members Formica, ranking member Ferraro and other Members of the Committee. My name is Vincent Pace. I'm an assistant general counsel for Eversource energy and I'm joined today by Mr. Digaunto Chatterjee, our Vice President of system planning and Mr. Allen Carey our manager of vegetation management. Thank you for giving us the chance to appear in front of you today. We submitted testimony on six Bills, but in the interest of time, I briefly summarize our comments on only four Bills and defer to the written testimony. For the first Bill, Senate Bill 882 an act concerning climate change mitigation it seeks to continue to position Connecticut as a leader in combating climate change and reducing energy consumption and if this Committee recommends the Bill but your testimony identifies two limited certifications.

Regarding the next Bill, Senate Bill 937, an act concerning emergency response planning, it involves the very important topic of emergency preparedness. We want to thank the towns and first responders for showing their feedback at today's hearing. We listened very carefully. We think it's important to emphasize that we support and we're actively

striving to make changes as it was for emergency preparedness. But our testimony explains the Bill may not be necessary, because PURA has a comprehensive pending docket reviewing all these issues and PURA has authority to order process improvements. We also believe that the PURA process for reviewing and ordering improvements, is the best process, because they have the benefit of looking at the first group stakeholders, all the information over the course of an entire regulatory docket.

The next Bill is Senate Bill 950 that's an act concerning the replacement of public utility poles and revising vegetation management and we understand how important trees for the landowners, but trees are also the leading cause of power outages and the Bill tries to balance those public utilities with enhanced the rights to trim along critical three phase backbone circuits and those are our major circuits that emanate from substations and they serve thousands of customers. The Bill frankly seeks to avoid situations where just one land owner's refusal to trim can affect thousands of customers along the major circuit. Now one change, we can support is to ensure we provide notice to effective landowners. And another change, we can support is to require utilities, the file their plan every year with PURA to ensure we provide greater transparency.

We want to thank those who testify today on the Bill, and we look forward to working with this Committee and other stakeholders on this process. The last Bill is house Bill 6524, an act concerning the solicitation of new fuel cells and we understand the importance of fuel cells and the role they can play in ensuring a diverse portfolio. If the Committee recommends this Bill, we request one very small clarifying change. I want to thank you for the chance to present this statement and I'm happy to answer any questions and I have Mr. Chatterjee and Mr. Curey here to answer questions about tree trimming. Thank you very much.

REP. ARCONTI (109TH): Thanks Vincent. I have a quick question. In regards to the PURA investigation, do you support that investigation going to its completion.

VINCENT PACE: We support PURA looking at process improvements and we also support the process of PURA taking evidence from stakeholders and making an informed decision and we recognize there were opportunities for improvement, we've acknowledged those. We want to work with all of you and PURA and DEEP and others to move forward and focus on improvements.

REP. ARCONTI (109TH): Okay, and with regards to the Bill would you would you guys still support it, if it were not rate based and you'd have to do go through their reconciling component.

VINCENT PACE: I believe that we could support that process, because ultimately when you have a capital tracker that would allow for recovery of ONM and capital. There would be some amount of return on investment, and we think the important point that Mr. Ausere made in his prior comments would be that, whatever that return would be, would be decided by PURA.

So, they would be able to take evidence and make a reason conclusion that, for only those costs that we prudently incur again that's subject to their full oversight and but if they conclude costs were prudently incurred, they would decide what the appropriate return would be on that capital investment and that could be accomplished through a tracking mechanism. We currently have in place something today called the ESI tracking rate which allows for the recovery of prudently incurred capital investments and also some ONM and that could be used for this purpose, also if PURA was amenable to doing that.

REP. ARCONTI (109TH): Thanks Vince, that's important and did you mind, I will read the testimony over the weekend, but the clarifying change in the fuel cell proposal.

VINCENT PACE: The only clarifying change we propose there is that the Bill properly recognizes utilities can only recover prudently incurred costs. We acknowledge that, we have to demonstrate that standard. But then it goes on to say, even if you demonstrate your costs were prudent you only may obtain cost recovery and our position would be that to be consistent with prior legislation. If a utility demonstrates it after prudently, then there would be cost recovery. As of as of right now it's not clear what the other standard would be we'd have to me to obtain cost recovery, but that would be the only clarifying change, we propose to that Bill.

REP. ARCONTI (109TH): Okay thanks Vince. Senator Needleman.

SENATOR NEEDLEMAN (33RD): Thank you. [inaudible] part of, there may be some additional concessions if we ever get this thing forward, one of which is to put in the process, clearly the tree wardens as the final arbiter on some of these issues, instead of going all the way to PURA but all the other things you mentioned, I believe, would have to be there on top of that, so I want people to feel heard and obviously know, maybe you don't know that we've had a minor issue in town here that is sort of exemplary, of the kind of problems that can occur granting the utility sort of blanket authority, I had enough experience to know why that is problematic also, so there's got to be a check and balance but there's got to be an ability to keep people safe and the grid Brazilian.

VINCENT PACE: We just want to express our appreciation for the Committee for raising the issue for public discussion. We think it's important to hear a dialogue that help you make an informed

decision and we look forward to working with this Committee and other stakeholders on this process. If Mr. Chatterjee or Mr. Carey would like to add to that they're welcome to do that.

DIGAUNTO CHATTERJEE: Thank you so much Senators and Representatives as I've mentioned some of these backbone distribution lines literally serve thousands of customers, I live in Farmington and we have my neighborhood, I know is served by one feeder that serves 3300 customers, 70% of those are in Farmington the others are an Avon and when that line comes down my neighborhood served by an alternate feed out of Canton, so to just exemplify why this something needs to change a resident in in Canton could have actually poor reliability and farming can, and likewise vice versa, so we have taken a hard look at our resiliency plan in Connecticut and we've gone through quite a few iterations and none of that can be accomplished without some real step change and enhanced tree trimming across the state, but really targeting that to specific circuits that are critical to the resiliency and for distribution system.

SENATOR NEEDLEMAN (33RD): I do appreciate that, and it is an ongoing conversation, as you know, the testimony today is very important. I'm assuming that you've gotten the message from the first select people that have spoken that as I've said it, it just wasn't me complaining about the communication breakdown, that is, you know critical communicate and that's what we all need you guys to do a better job and we'll talk more. Thank you, Mr. Chairman.

REP. ARCONTI (109TH): Thank you, any other questions, comments.

ALAN CAREY: This is Alan Carey. I do have a comment, manager vegetation management at Eversource. I just like to just point out a couple of things regarding this Bill that I think might be important in the consideration. We have about

16,700 miles of overhead conductor. In about 4700 of those are what we consider the backbones of those circuits and they run through all of the towns and it's the change to 16 234 that first defines what a backbone is and then secondly allows us to perform tree trimming without the burden of getting consent, but rather and notifying customers.

And, while our consent rate is high, we do have a number of customers that do hold up tree trimming in various areas, especially along the backbones and one of the electrical components of all this is that it only takes a few customers denying a couple of hazard trees or trees that are, that are very close to the conductors to cause outages and that can take out the entire backbone of the circuit, which feeds critical customers, hospitals, you name it along with all the other customers down line, so this Bill is really taking a look at the subset of our overhead lines and requesting that we go back to a notification process that was put in place after the storms of 2011 and 2012.

After those storms, there was a two panel Committee, as well as a vegetation management task force that essentially some form or another recommended legislation, legislative changes to 16 234 to make our jobs easier in improving electric reliability. A few years later, after those positive changes in our, in our view were enacted. There were, there was a customer I believe in the Hampton area that complained that she was not notified and the entire premise of the notification Bill was changed to one of consent and as I indicated earlier, we get, most of the time we get consent, in fact, about 95% of the time we get consent, 5% of the time we don't and it's no contacts we can't find the folks where they asked for a modification, which is problematic, or they simply deny us. My point in bringing that up is that we spend millions of dollars a year in getting to in, in going out and getting consent when the fact of the matter is most of the time, we get it.

In the individuals that are problematic there certainly is a remedy that spelled out in 16 234 but it's burdensome and time consuming and would place an undue time constraint on PURA bringing all of these issues to their attention. We did have one that we did bring to attend, we had many but we've had one in particular that we did bring to attention down in the Essex area and after four months of discussions and back and forth, we ended up with what we call a modified light trim which was kind of where we started out in the first place, and really didn't get very, very far with it. So, we think this Bill is very important in terms of improving electric reliability for our customers and targeting the backbone where it's most critical.

REP. ARCONTI (109TH): Thanks Alan. No further questions. Thanks guys.

VINCENT PACE: Thank you very much.

DIGAUNTO CHATTERJEE: Thank you.

ALAN CAREY: Thank you.

REP. ARCONTI (109TH): Mr. Quick.

WILL GINN: We are on to Jordan Garfinkel followed by Duncan Broatch.

JORDAN GARFINKLE: Thank you Chairs, Needleman and Arconti, Ranking Members Formica and Ferraro and Members of the Committee. On behalf of Bloom Energy, I appreciate the opportunity to testify on Race Bill 6524 enact concerning this whole station of new fuel cell electricity generation projects.

My name is Jordan Garfinkle, and I'm the Senior Policy Manager for the Woodland for Blue Energy. Blue managing manufacturers of distributed power solution based on a solid oxide fuel cell that can be deployed at key locations on the electric.

Grid Cells in general, are also capable of running on renewable hydrogen, so an investment in fuel cells today is a down payment on the hydrogen economy. We appreciate Connecticut's long-standing commitment to distributed generation, and it's focused on ensuring reliability and resilience. The Bloom is generally supportive of the Bill, but we have a few specific concerns, in some jurisdictions regulators have combined procuring customer grid resilience with the need to, also cheap cost savings, and the electric distribution system and want to give you an example.

In New York City, Bloom work with Con Edison to install fuel cells at hospitals state agencies, in a low-income housing development and the key here is that these projects targeted overloaded circuits, which were actually identified by distribution engineers at the utility. These projects avoided infrastructure investments of nearly a Billion dollars in repairs savings.

This Bill is an opportunity for Connecticut to use distributed generation to enhance resilience, while at the same time, and voting costs that would otherwise be for my right there is. The legislation previously included language around distribution system benefits, but it has been removed in the proposal.

Briefly, I want to touch on bid preferences, we believe in this program, they should focus on how a given project will improve reliability, and reduce system costs, regarding brownfields in particular this kind of a preference makes a lot of sense in the context of solar where there's a real concern about using larger is a forest, or farmland for solar panels. But those issues don't really apply to fuel cells, since they have extremely small physical footprints, compared to solar, and we feel that the preferences should focus on evaluating, which projects can most effectively bring to



ratepayers the range of benefits, offered by fuel cells overall.

So, we suggest the Committee reinserted the language from the existing statute about providing distribution system benefits, as well as consider a few specific bid preferences that touch on the demonstrated, efficiency and reliability of a given technology, its ability to avoid transmission and distribution costs, the degree to which a project advances decarbonization of the electric system, and Connecticut and the extent to which a project enhances resiliency.

And finally, we're concerned that the submission date to pure of January 1, 2022 will ultimately drive selections towards preexisting proposals, rather than projects that best serve the objectives of the legislation.

Thank you to the Committee, for the opportunity to testify today and for the transparent nature these proceedings, we've provided some additional detail and are written testimony. Thank you.

REP. ARCONTI (109TH): Any questions comments, Representative Meskers?

REP. MESKERS (150TH): Yes, very simple and direct question, your concern on January 2022, the filing, you said you were concerned about the deadline, in that the deadline is too short out there for plans.

JORDAN GARFINKLE: Yes, sir.

REP. MESKERS (150TH): Good Okay, can you elaborate?

JORDAN GARFINKLE: So, in the project timeline and I keep in mind, I work on the policy team in New England, I am not a project developer, and I'm an engineer, the project development timeline is expected longer when starting from scratch identifying sites, and implement together a project.

Then, we feel is allowed, with January 1, deadline, and so we recommend, and we elaborate a bit in our written comments of bit extra time, to pull together proposals for the Program.

REP. MESKERS (150TH): Okay, and so your request, did you have a specific timeline you're requesting?

JORDAN GARFINKLE: The evening in the written comments?

REP. MESKERS (150TH): Yes.

JORDAN GARFINKLE: Yes, I think a range of, I think an additional six months is something that.

REP. MESKERS (150TH): That's fine, I haven't had a chance to go through all the commentary yet, that's why I was asking if it's fine, thank you.

REP. ARCONTI (109TH): Thanks Jordan.

JORDAN GARFINKLE: Thank you.

WILL GINN: Up next, we have Duncan Broatch followed by Andrew Peklo

DUNCAN BROATCH: Okay, thank you and my name is Duncan Broatch, I come here representing both CSP a kind of a small power producers association that has been in existence since 1985, comprised of people and companies involved, or interested in small renewable projects in Connecticut.

I also represent my company Summit Hydro, I've been developing hydro operating, and maintaining hydro in Connecticut since 1983. So, I come here in support of Bills 882952 and 6523, provided that these Bills incorporate the warning that we propose to accommodate small existing hydro projects in Connecticut, and when I say existing, I mean projects that are operating today that are providing

renewable energy, and that are serving our state very well and all the benefits that hydro offers.

And so, what we would like to do is include new wording in the VM section of the statutes to accommodate existing hydro, because there's a real problem going on right now, that I will explain regarding these very beneficial projects. So, I have submitted testimony for CSPPA for summit, and as the backside attached proposed working with the words are underlined that we're proposing to accommodate small on runner forever hydro in Connecticut existing projects that are under three megawatts.

So, what is the problem? The problem is that hydro-projects that exist, and don't are, they're getting very poor rates for their energy they're producing, used to be that we had long term power contracts that we work hard for back in the 80s, and we were able to sign long term contracts, but those days are gone, and there's no programs out there, that hydro really can apply towards. So, therefore those contracts have all expired pretty much, and these projects, and now are living off of just bear low rates of the ISO clearing price, which last year was only two cents a kilowatt hour.

So, imagine trying to operate a project, or renewable project, and only two cents a kilowatt-hour, it's very difficult. So, what's happened is, we've lost some projects already, the projects that have been decommissioned, for various reasons, most specifically economic, our own ego pawn Manville carpentry glens falls Cobra and lime list of 10 other projects that we could lose.

So, I think, it's in the best interest of citizens Connecticut, that we come up with a plan for these treasured hydro projects that are, you know, serving our goals, and provide many benefits, these benefits of hydro include zero carbon, stimulating the local economy, recreation, property tax payments, damn

safety, damn maintenance flood control, removal of trash from the rivers and fish ways of talking about fish ways all hydro is must obtain for licenses and they're all mostly coming up for relicensing now, and this relicensing is very expensive, especially the requirements of the current environmental restrictions, and requirements, including fish ladders. So, these projects simply cannot afford these types of expenses, I'll tell you about my little hydro project Dave upon it, they will Connecticut put that project online, and 1995. Here it is before, here is me working on it, with my bare hands building a draft to, they're not here, it is today, as it exists, and it's running right now to 100 kilowatt project last year, I ever totally two cents per kilowatt hour for the energy from that project.

My income was only \$7,000, my expenses were \$15,000, so I'm running that project that a loss. I enjoy it, because it's doing a good thing, but we can't run these projects at a loss for very long, and we're going to lose them. So, I encourage us all to please, let's work on awarding for existing hydro in Connecticut to give them the rates that they need and deserve, so that they can survive, and that would be done with the wording that we propose.

So, I hope that covers the issue well, I drill is a significant resource 13 projects in Connecticut.

REP. ARCONTI (109TH): Yes.

DUNCAN BROATCH: You know, right now, hydro is providing a significant.

REP. ARCONTI (109TH): Please do the rest.

DUNCAN BROATCH: Okay, I've got over the three minutes. So, right now Connecticut's mixes, you know as 40% nuclear 55% gas, and 5% renewable out of that, 5% renewable, 37.5% of solar, 37.5% is biomass and trash, and 25% is hydro, so that's a significant

portion, and I hope you can help us to save these projects and give them a better rates that they need and deserve.

REP. ARCONTI (109TH): So, are there any questions? They took it, knows your association are you participating in the pure docket on the successor program, for being them and getting these comments as part of the record, and working through the regulators.

DUNCAN BROATCH: No, we have not done anything relative to that program, because we have not been able to have our hydro projects take advantage of it, to my knowledge, because the camp is already been met by other solar projects, and we just aren't suited for the way that it's formulated right now, it just doesn't work for hydro, that's why we'd like to incorporate some wording to tailor a hydro, so that we can get in there and get the benefits that other renewables are also getting.

REP. ARCONTI (109TH): Rep. Ackert?

REP. ACKERT (8TH): And Mr. chair, and thank you for your testimony you strike up struck a nerve with me. A little bit in terms of I had asked earlier to the Commissioner dykes, about how do we gain the percentage needed to reach zero carbon supply in Connecticut, and one of them was hydro, but out of out of the area height? So, are they paying, if we were to purchase hydro from, you know, like a large, like hydro Quebec is what always comes up the mind, or something like that, or they literally only getting two cents for that energy, when we could buy, when that's what they're getting for, that you, because you're saying you're only getting two cents per kilowatt here in Connecticut?

DUNCAN BROATCH: That's what a lot of our existing projects are getting. Yes, we used to have long term contracts, but those have expired, there's no programs out there that we can latch on to, like

virtual net metering. So, we take the whatever we can get, which is the spot market, and last year that was two cents.

That's right, I know Hydro-Quebec that's something different, that's not us, I mean, you know, Connecticut pays Hydro-Quebec under some contracts for Hydro-Quebec energy.

REP. ACKERT (8TH): No, what I was comparing to was, you know the ridiculous, the low I know we want to help our ratepayers here, but you know, if you're with your camp pencil out these projects, they're not going to exist, obviously, because they don't exist, you said a couple of them, one on one you mentioned commentary, you had a small one, I think, in one of the legs that we had here.

But Okay, I just wanted to call correlate, if we're buying it from out of the area, and they're not sending in here for two cents a kilowatt, I don't think so. So, but that seems ridiculously low, and we're talking about some of the other areas, that were pending 14 cents for virtual net metering, and I don't have the numbers exactly right. But, I just that's kind of was odd, when you, so when I heard two cents can't make you, can't make a project work, thank you for your testimony to take him, Mr. Chairman.

REP. ARCONTI (109TH): Thank you, Representative.

Seeing no further questions, thank you Duncan.

DUNCAN BROATCH: Are you sure on, I've been pleased to answer any more questions, if anybody wants to contact me, and check out our websites, and I thank you very much for your consideration today.

REP. ARCONTI (109TH): Thank you, this the --

WILL GINN: Next up is Andrew Peklo followed by William Herchel.

ANDREW PEKLO: Hello, can anybody hear me?

REP. ARCONTI (109TH): We can hear you.

ANDREW PEKLO: Okay. Hi my name is Andrew Peklo, I'm an architect and woodworker, live in Woodbury Connecticut on the punk rock river 40 years ago. I bought what I call the millet on parag -- a former will and mill, and operate my business and live above it. 40 years ago, I bought it, because I thought it'd be fun to interesting to make reek redo the electrical production. I got serious about 10 years ago, and now have a win for the process, and have it does have a fork license. I'm scheduled to start construction, this year, this season, and to piggyback on Duncan broaches thing.

I would like to support the 822 the 952 and as 6523, I see the 822 Bill, setting a goal, which I think is important, and I see the other two Bills could potentially be supportive of the kind of environmental. Let's see, forget this, anyway, the, I think I need like Duncan is it, we need to include small hydro into the mix.

As Duncan started to say there are many things small hydro does it, I'm going to have to put in efficient eel passage clean trash out of the river, it helps preserve this historic property. I am a business and manufacturing, and it also preside provides recreation, fishing and boating. And being in Woodbury, we are in region 14, the high school as a Program, which could be potentially interested by people, who want to see clean energy -- clean renewable energy in person on a small scale. So, the bottom line is, I would like small hydro, to be included with and Duncan men said existing, but I think it should be new and new hydro, because there's plenty of potential sites in Connecticut, and if they had some incentive to be developed, it would help solve the clean energy project, or contribute to clean energy. Thank you.

REP. ARCONTI (109TH): Thanks, Andrew. Any questions from the Committee Members? Seeing none, thank you for your testimony. Mr. Ginn?

WILL GINN: Next up, we have William Herchel followed by Len Greene.

WILLIAM HERCHEL: Members of the energy and technology Committee, thank you for this opportunity to provide commentary on SB952 an act concerning certain solar energy projects in HB 6523 AN ACT CONCERNING VIRTUAL NET METERING CREDITS FOR CERTAIN MANUFACTURERS IN DISTRESS MUNICIPALITIES. In general, I've my firm support to the concepts provided for in these Bills to increase the adoption of renewable energy here in Connecticut.

With that said, we have some suggestions and additional information that we deem important bring to your attention. There briefly, I'm William Herchel. I'm the CEO of Verogy, a Hartford-based commercial solar developer, we've been in operation since late 2017. Personally, I've been active in the Connecticut solar industry, since 2012, throughout my time here in Connecticut solar market, I've seen tremendous growth, job creation and significant solar energy deployment. This is due in no small part to the efforts of the Connecticut General assembly, the Department of energy, environmental protection and the public utilities regulatory authority, so thank you very much for that effort.

Everyone in our industry recognizes that is absolutely imperative for the general assembly, the state's administrative agencies in the solar industry to work together to achieve Connecticut's lofty, and critical carbon reduction goals. Understanding this is the foundation for the testimony, Verogy respectfully submit the following suggestions and comments.



First, as it pertains to section for of SB 952 in section one of HB 6523, in general, we support the expansion of virtual negative programming Connecticut. But, the proposed expansion in both Bills is insufficient to make any meaningful impact to the over 30 minutes of BAT municipalities in the state that are waiting for this benefit with projects in hand it, essentially cuts off those municipalities, and others that might try to avail themselves to such benefit.

I would expect that nearly 75 megawatts of projects that are in later stages of development, the basically hung out to dry, or caught off from an opportunity to participate in this program, If the intended \$10 million increase, were to become law. We support the inclusion of carve outs for alliance school districts, and the new suggested inclusion of manufacturers from distressed municipalities, but not at the cost of excluding all other municipalities from participating in this program, which would be the outcome of the legislation, as drafted.

We believe that the CGA overestimates the amount of project that can be built with the proposed \$10 million, increase in the Program, and perhaps misunderstands the perceived cost the repair virtual net metering. I think some of this has been discussed through other commentary earlier today.

As drafted SB 952 would allow for approximately 20 megawatts of projects on the solar side, it really no non-alliance miscible projects, based off the proportionality of the language in the Bill that exists today.

WILL GINN: 30 seconds remaining.

WILLIAM HERCHEL: Jumping to section five of SB592, just very quickly, we strongly oppose the permission of electric distribution companies developing constructing owning and operating solar projects

here in the state. Such provision isn't direct contradiction, the purpose of segregating generators, and electric distribution companies.

In general, we really question, why the energy and Technology Committee would consider 150 megawatts of solar owned by the EDCs that would be installed at a premium, when compared to what private developers could provide. Instead of permitting the virtual net metering expansion, that would allow for those different municipalities in the 75 megawatts that are sitting there waiting, to be developed at presumably a better cost for the repair in this program,

WILL GINN: I'm sorry.

WILLIAM HERCHEL: Thank you very much.

WILL GINN: Right on time.

REP. ARCONTI (109TH): Thanks, William. Thanks for your testimony, and for all the work you do through your company for the state, helping us meet our clean energy goals. Any questions? Seeing none. Thanks for your testimony.

WILLIAM HERCHEL: Thank you.

WILL GINN: Next up, we have Len Greene followed by Donna.

LEN GREENE: Thank you very much, Senator Needleman Representative Arconti, Members of the Committee, I appreciate the opportunity to offer testimony today, for the record, my name is Leen Green and I'm here to testify in support of Senate Bill 952, on behalf of FirstLight Power, which is a New England base clean energy company, with many assets located right here in Connecticut, including much of the state's hydroelectric generation capacity, and the states only pumped hydro storage facility located in new Milford.

First light supports Connecticut's efforts to decarbonize the electric sector, and we believe that energy storage will play a crucial role in achieving this goal. The need for energy storage and it-decarbonized system is widely recognized throughout New England, and Connecticut will greatly benefit from passing Senate Bill 952, and creating programs to develop storage projects throughout the state of submitting written testimony. So, I won't cover all of the comments, but I'd like to focus on one specific record recommendation that we have.

Section 3 of the Bill would encourage the development of a program that incentivizes standalone Storage projects, as well as projects that are paired with class one renewable resources.

Our company has a strong interest in developing energy storage projects here in Connecticut, and particularly those, that leverage our existing fleet of zero carbon hydro power. Under current statute, much of Connecticut's hydropower fleet does not currently qualify as a class one resource, however, many of these resources, which are emissions free resources provide significant value to the local system. In addition to providing the zero emissions generation that I mentioned, local hydropower offsets peak demand provides ramping regulation other ancillary services and helps to improve summer and winter peak reliability, which is crucial and recognize under this Bill.

Pairing energy storage with flexible generations, such as hydro power will substantially contribute to additional system reliability, system resiliency and particularly during those critical summer and winter peaks.

So, with that, I would like to recommend that the Committee consider adding provision that would enable the state to capture the additional value, that storage paired with local hydro power,

resources can provide by enabling this pairing of the state can really capture some great opportunities here, and I urge the Committee to consider that change.

With that, that's all I have, anybody has any questions?

REP. ARCONTI (109TH): Thanks, Len. Any questions? Are you happy you're on this side, right now, like it used to be?

LEN GREENE: Especially, now that it's virtual doesn't look like the new, though.

REP. ARCONTI (109TH): I don't see any questions, thanks. I look forward to connecting offline.

LEN GREENE: Thanks so much.

WILL GINN: Next up, we've Donna Hamzy Carroccia, followed by Lori Vitagliano

DONNA HAMZY CARROCCIA: Good evening everyone, thank you for your continued patients.

As you move through this really long hearing day, and I will not take up much of your time, I'm just here to talk briefly about Senate Bill.97937. related to the storm response, and would like to just thank the Committee for continuing to pay attention to efforts to create a more uniform and efficient storm response management system in our state. I believe that the language in this Bill, really supports the efforts by several municipalities, who've been participating in the pure proceeding that has been discussed today, I won't go into detail around that I have submitted testimony on that Bill.

And in addition to that, I really just like to speak briefly to the virtual net metering Bills. I lump them together, and just to say that I, we appreciate

the intention of the Bills and understand what the Committee is trying to do. We just like, we consistently asked would really support the elimination of a cap, so that there are no competition around who gets credits, but instead all of the potential projects out, there can benefit from this great program.

And then, finally, I will end with -- I believe it's Senate Bill 950, related to pull replacement of vegetation management, we really support section one, especially since it recognizes the make safe efforts to bring pulls back to, you know, structural repair in an emergent situation, particularly with the attachments. And then, in addition to sections, two and three, I know Matthew Knickerbocker spoke on our behalf earlier, and didn't speak on our behalf related to his comments on this Bill.

And that was simply, because we've just not I don't have consensus among my membership around vegetation management, and whether the language in the Bill makes sense for everyone, but I will say that every source has reached out to us, and we have a meeting scheduled with them next week.

So, hoping to have great conversations offline, and commend them for their outreach to us related to spill, I'll stop there.

REP. ARCONTI (109TH): Any questions? Seeing none, we'll talk soon thanks.

DONNA HAMZY CARROCCIA: Thanks, everyone.

WILL GINN: Next up, we have Lori, but I don't think I'm, can check real quick, oh wait no she isn't gonna, let her and now sorry about that. We have Lori speaking now, and then we have Frank Lacey.

Lori, are you there?

LORI VITAGLIANO: Yes, I am. Good evening Chairman Arconti and Chairman Needleman. My name is Lori Vitagliano, and I'm from the South Central Connecticut Regional Water Authority, and I appreciate the opportunity to testify and provide comments on how spill 6523, an act concerning virtual net metering credits for manufacturers in distress municipalities.

The regional water authority respectfully request that this Bill be amended, to include political subdivisions of the state, as allowable virtual net metering hosts. state and Municipal entities are allowable, hosts but political subdivisions are not included, and they must be listed in order for the RWA to participate and benefit from solar power, and virtual net metering this expansion would allow us to further our commitment to Connecticut's energy goals, to energy efficiency, to environmental sustainability.

While helping us mitigate our operational costs through reduced energy expenditures, so in the interest of time that was the big ask, and there are request there's, so much more on my testimony on why this would be helpful to us. For example, just quickly on that we have 27,000 acres and citing solar energy, and solar projects are not always in the best interest of the property, so virtual net metering will really help us.

Thank you for your time this evening, and take any questions, thank you.

REP. ARCONTI (109TH): Thanks, Lori. Any questions from members? Being none, thank you for your testimony.

LORI VITAGLIANO: Thank you, have a good night.

WILL GINN: Next up is Frank Lacey, can be followed by Brenda Watson.

FRANK LACEY: Good afternoon, everybody can you all hear and see me.

REP. ARCONTI (109TH): yes.

FRANK LACEY: Thank you, Senator Needleman, Representative Arconti and Distinguished Members of the Committee. Thank you for allowing me to testify today. My name is Frank Lacey, I'm a consultant testifying on behalf of energy, I'm here in opposition to raise Bill 6526. I'll be limiting my testimony to the proposed changes in Section 7A, energy is fully supportive of the intent in many of the provisions of this Bill. However, we believe the legislature is approaching these issues in a manner, which may cause more harm to customers, then good Connecticut adopted a policy to allow markets to govern energy prices over 20 years ago, and our wholeheartedly support to the policy. However, Connecticut has never really developed a truly competitive energy market.

Utilities to continue to subsidize the cost to serve customer as it takes standard service with distribution rates, which provides them with a significant unearned competitive advantage. Energy does not accept the direct comparison of competitive supplier prices to utilities standard offer prices, because of the wide variance of product types and terms offered by suppliers. However, many others wholly endorse that comparison as valid, as a result, the language proposed in section seven will be harmful to customers, and to the competitive energy marketing.

A standard service customer pays utility for generation procured in the standard service options and some other energy related costs that have already been discussed today. My testimony is not about those costs, however it's about the costs that the utilities do not include in their standard service rates, is the absence of these costs that make the language in section seven deeply troubling.

Specifically, the utilities do not include any cost, to serve, or service their customers in standard service rates.

Distribution customers pay the cost of nearly every employee engaged in the provision of standard service, utilities don't even allocate accounting resources to count the hundreds of millions of dollars in revenues, it receives from the standard service business.

You heard that correctly, even the people that account for the money, that standard service brings in our paid with distribution rates. Energy commissioned a forensic accountant to analyze these costs that should be allocated at utilities in Pennsylvania and Maryland. We found that the subsidy was equal to 1.25 cents and 1.18 cents, per kilowatt hour respectively.

It's important to realize that a proper cost allocation does not indicate a rate increase for standard service customers, it just means that a portion of the distribution rate would be reclassified as part of the standard service rates. So, the total cost of the same the charges, we just come from different cost buckets.

WILL GINN: 30 seconds.

FRANK LACEY: I understand, we're not legislated cost allocations today, but until the standard service prices reflect the true cost to serve customers, legislation that conditions, the licensing and operations on an arbitrary evaluation, and market pricing, is anti-competitive, will have a chilling effect on the state's business in energy market environment.

In closing the energy landscape is changing, it's being driven by environmental policies federal policies and state initiatives, completing the proper restructuring of the market with remedy many



of the legislators' concerns, and will facilitate achievement, and many of Connecticut's, environmental and policy goals. And our happiness is to discuss this in more detail at a future opportunity, but for the foregoing reasons energy respectfully opposes R.B. 6526. Thank you for your time.

REP. ARCONTI (109TH): Thanks, Frank. Any questions from Committee Members? Seeing none; thanks for your testimony.

FRANK LACEY: Thank you.

WILL GINN: Next up is going to be Brenda Watson, you have been told, is actually going to be long and then followed by Juliann Blanford.

BRENDA WATSON: Is actually made-up Brenda Watson, I thought that I would be able to testify, but I'm here, thank you for that.

Chairs, Senator, Needleman and Representative, our content Ranking Members, a senator Formica, and Representative Ferraro and Honorable Members of the Energy Technology Committee, we thank you for the opportunity to testify this evening, and support of Bill 882, an act concerning climate change mitigation and home energy affordability, and Bill 6526, an act concerning electric suppliers.

I won't read my full testimony, as we submitted them electronically, but we just quickly wanted to know that operation field has been studying energy affordability for many years now, and having the ability to know what your potential electric Bills will be moving into a new home, or apartment. We believe to be transparent, as well as an opportunity for folks to engage in the weatherization process.

As far as the crux of the Bill, which would require renting, or selling a housing unit to disclose the properties energy score. Again, we believe that

this information for consumers is a basic, it's just purely basic, we know that there are electricity costs happens to be the leading cause of homelessness in our state, Commissioner dykes noted that this morning and electric service is a rental requirement. So, being able to have this information disclosed up front is critically important to the people that we serve.

As far as raise the Bill 6526, and at concerning electric suppliers, we urge you to pass this necessary consumer protection, and Operation Fuel we offer grants to families, struggling to pay their electric Bills and we regularly notice that clients who apply for assistance if they're signed on with a third-party supplier, we find that they are paying sometimes triple the standard service rate. So, what we've done is upon processing those applications for folks, we send a subsequent email to them, noting that, we noticed that they're engaged with a third-party supplier, and we highly encourage that they either shop around or pay attention to the end date of their contract.

So, we are again support this Bill, and we're hoping that it most its way through the legislature and onto a boat for. Thank you.

REP. ARCONTI (109TH): Thanks Brenda, thanks for your testimony, as always, representing buskers has his hand up.

REP. MESKERS (150TH): Brenda if I could make a request. To the extent that you get a release from some of those people, I'd love to get some of those Bills in front of the Committee.

BRENDA WATSON: What?

REP. MESKERS (150TH): This is part of the issue with third party energy suppliers that I'm particularly concerned about, it's predatory pricing, it's not a service, if the Bill is more

expensive and it's been if they've been engaged with a low-cost introductory offer and a ramped-up rate. So, to the extent you have the information, I really appreciate it.

BRENDA WATSON: Yes, we do have that information for everyone, who applies for an operation fuel grant they do sign a release. And we could also provide that information that still protects the customer, we can block out the customer account number and name and address. But I also just wanted to point out that some consumers are desperate enough to pay the cancellation fee, because paying that fee is still cheaper, than paying the next electric Bill that's going to come to them in the next month.

We've seen people, who are on extend comes, social security disability, paying sometimes 20 cents per kilowatt, it's really one of those things where I've heard people say hard to reach customers, you know, that 1 low and moderate income customers are hard to reach. They're not hard to reach at all, because the third party supply market has reached thousands of them, and it's because they're motivated to do. So, we're motivated to really reach these, you know, low and moderate income customers with information that is important to them, we have the ability to do that, it's just a matter of will and resources.

REP. MESKERS (150TH): Thank you for that, it's a concern deeply for me, we talk about justice, we talk about economic, assistance for needy residents, we talked about doing it well, and doing it smartly, and then we see practices like this come up, that essentially defeat half of what we're trying to get accomplished in bringing a little more social equity and economic equity to our residents. So, I appreciate your feedback there. Thank you.

BRENDA WATSON: You're welcome.

REP. ARCONTI (109TH): Thanks, Representative. I see no more questions. Thank you for your testimony.

BRENDA WATSON: Thanks. Bye now.

WILL GINN: Next up, we have Juliann Blanford followed by Jonathan Miller.

JULIANN BLANFORD: I am, my name is Juliann Blanford, I'm here in supportive Bill 882, 2952 and 6523. I have some in Britain testimony requesting minor modifications to the virtual net metering program, and the reason I have is in support of the advantages of hydro and specifically small hydro within the grid, the environmental improvements, the consistent energy the really the backbone of renewable energy grid that hydro power can provide.

I urge it, to be recognized and appreciated within the renewable energy grid that we're going to create, and the virtual net metering program that we wish to modify. I want to bring the advantages of hydropower in a bigger way to Connecticut, and provide those benefits to Connecticut. My perspective is, I am a general manager of NuSTREEM. NuSTREEM is a modern hydro equipment manufacturer within Connecticut, we manufacture modern hydro equipment, right, and Mansfield Center Connecticut our solutions include smart controller devices that improve efficiency of turbines that are existing.

We've got a modern hydro turbine that creates energy from 75 kilowatts to 250 kilowatts. It's a modern hydro-turbine that has all the environmental considerations, and safety features that we'd want of energy generators that are connected to our grid. Also, in the past year, we've been developing a way to put the turbine in a shipping container, and in that way lowering the cost of developing hydro sites, and making hydro power sites more rapidly deployable.

I tell you all that, because when you support these changes, and you support small hydro power, you're not just supporting the small hydro power that's in existence, or that could be in existence in Connecticut, but you're also supporting a company that is innovative, right here in Connecticut paying high paying jobs. So, I urge you to support these Bills, I think Connecticut should take advantage of the hundreds of on power damn, so that exists for small hydro power.

I think, with these modifications, we can preserve and enhance the small hydro power sites that are currently in operation, and we can increase NuSTREEM's production, and bring more high paying jobs to Connecticut. Thank you very much for the opportunity to speak.

REP. ARCONTI (109TH): Extremely your testimony for sticking around represented backer.

REP. ACKERT (8TH): Thank you, Mr. Chairman, quick question, I literally could probably walk to your office next door here, and commentary that I met name, and know where there were mostly, where's your customer base at? Where do you supply your equipment to?

JULIANN BLANFORD: So, we do have a deployment here in Connecticut. Mansfield Hollow Hydro has five of our hydro turbines right there. We also have one that's deployed in Massachusetts. Those were installed in 2014, and both of those sites received renewable energy credits. Unfortunately, now the demand that we're responding to, is mostly outside the state and around the world.

REP. ACKERT (8TH): Okay, Alright, I just, think I just thought about these are like little localized micro grids, if you think of resiliency a power plant, right here in the state, it could be essential, so I thank you for you coming on a steak and thank you, Mr. chair.

REP. ARCONTI (109TH): Thanks, Representative. I see no more questions. Senator Formica.

SENATOR FORMICA (20TH): Thank you very much, Mr. Chairman, sorry, thank you, Juliann. One question regarding capturing wave energy, is that technology the same, or similar? And do you morph into any of that?

JULIANN BLANFORD: Yes. So that's a captured under marine technology, we'd call that, and that's within the hydro power, like if you go up to the, I know federally it's under the water power technologies office, but it is we separate it within the energy as a marine technology, and new stream, now we don't do marine technology.

SENATOR FORMICA (20TH): Okay, thank you.

JULIANN BLANFORD: You're welcome.

SENATOR FORMICA (20TH): Thank you Mrs. Chair.

SENATOR NEEDLEMAN (33RD): Thank you well, who's up next.

WILL GINN: Jonathan Miller, followed by Paul Corey.

SENATOR NEEDLEMAN (33RD): Thank you, Jonathan Miller.

JONATHAN MILLER: Everybody able to hear me all

SENATOR NEEDLEMAN (33RD): Yes.

JONATHAN MILLER: Great. Well, thank you to the Members of the Committee for the opportunity to be here today to discuss some of the promising legislation proposed for renewable energy. My name is Jonathan Miller, and I'm here to represent Gravity Renewables, an owner operator of small hydroelectric projects in Connecticut and throughout

the Northeast. Specifically, I'm here to support Bills 882, 952 and 6523, and suggest some minor modifications that would make these Bills more suitable to sustain an investment needed to keep Connecticut's small hydroelectric baseline projects at the full potential.

As a foundation to our support and requested modifications, we want to distinguish how small hydro is different than other technologies, specific the other renewable resources. Just as with other renewable resources initial investment is needed for hydro. However, small hydro differs, and that requires substantial and ongoing investment in order to maintain its viability. These investments maintain civil structures replace critical equipment, and manage environmental and regulatory compliance. However, the benefits of these investments go beyond just maintaining the viability of renewable energy generation. Small hydro maintains healthy waterways for fish enhances recreational opportunities, creates jobs and often rural areas, and provides critical public safety benefits.

That being said, Connecticut is currently very limited in programs that directly support small hydroelectric facilities. As an illustration of why programs that promotes small hydro, are important, I provide the following example, in Massachusetts, for instance Gravity Renewables, was able to breathe new life into a hydroelectric plant that had existed for some time, but was struggling to make investments with its current rates through a local grant program, and a hydro specific rate Program.

Gravity renewables was able to justify more than a million dollars of investment in the penstock and other site improvements that dramatically increased. The generation ensured the plant would endure long into the future, it both energized and monitor diet modernize the facility. Meanwhile, just 24 miles away from this facility in Hartford Connecticut, a

small hydroelectric facility was recently retired, because it wasn't able to justify the investments merely to stay in operations. There is simply no economic incentive to do, so this deteriorates the existing renewable resources needed to meet Connecticut's long-term energy goals.

Additionally, Connecticut will incur the cost of replacing this resource with new resources in the region, will lose the positive external benefits to waterways, recreation and safety. For this reason, we believe that the proposed Bills are important for small hydro, and why we have provided written language, and written testimony that we believe, that could further support small hydro, as a key component of Connecticut's renewable energy baseline to and beyond.

Thank you, I'm happy to answer any questions.

SENATOR NEEDLEMAN (33RD): Thank you, Jonathan, I appreciate this. Do you do, you do pumped hydro, or you primarily dams?

JONATHAN MILLER: Well, that's actually an interesting distinction for the most part, we deal with natural waterfalls, or natural differences in elevation for the water. So, our if we have impoundment, they're generally small, they're considered run a river and pumped hydro is kind of a different animal, and in generally not what we refer to, when we kind of categorize ourselves as small hydroelectric.

SENATOR NEEDLEMAN (33RD): I just was wondering because the gravity in your name, whether that was a component of it. If you had to guess as a professional in the field, how many megawatts worth of aggregate hydro, are there in the state, legacy at least if they were upgraded?

JONATHAN MILLER: Yes, so I think, I'll answer your question in kind of two different ways, there's how



many megawatts are applicable to the types of modifications that were suggesting? And it's important to note that, when all of the folks here that have talked about hydro, have commented, we're generally a well-defined sphere?

We know where a lot of these plants are, and so when we advocate for participation in, or carve out in virtual net metering, for instance, it's a relatively defined universe, and so we estimate that it's somewhere around 25 megawatts are below. But these are also projects that need support, and they don't have the support locally right now to kind of bring all the benefits that they do on a daily basis.

SENATOR NEEDLEMAN (33RD): So, within a class one renewable range, that's not enough money per kilowatt hour in terms of the, to make the investment, if there was a guaranteed rate.

JONATHAN MILLER: Well, so with the class one renewables, importantly, many of these existing small hydroelectric projects don't get the benefit of class one REX, because they were developed a prior to certain time. So, I think Duncan brooch was on here earlier, and he talked about how rates for some owners would get down into the \$20 a megawatt hour range, and that really threatens the ability for those operators to sustain their existence and really provide the benefits that go much beyond, just creating renewable energy, which is important. But it's, there's waterways, there's recreation, or sit in, and you know, more important than probably anything is public safety.

SENATOR NEEDLEMAN (33RD): Well, I do want to say that Connecticut and much of New England has a rich history of hydro power. We have an operating small power plan at Center for architects in town, here on the maintain the DMN, it's costly to them, I'm sure, but now they're demonstrating their commitment to renewables and they've done that, for many years.

And I think that there are intangible benefits to this, I often wondered, with all of the emphasis on larger scale renewables.

I suspect the environmental impact on things, like managing hydro in the Connecticut river, for example, deploying some kind of ability there, I don't have any idea, how that scales up obviously, we're not a Hoover dam, we're not flooding Hartford anytime soon. So, but I'm a supporter, what that means ultimately, I'm not 100% sure, but I think the Committee Members want to preserve that legacy, so we need, we've gotten the message. I think Leon Sweeney is the lobbyists, then he's talked to me about it, and we probably need to figure something out.

JONATHAN MILLER: I think you hit an important note there, just to clarify that, there is a lot of intangible benefits, that hydro provides, that are very costly, that we aren't compensated for, and so, with all the testimony that you're hearing today, I think there's a lot of advocacy to recognize that that our benefits go deep, and they run deep in the state as well.

SENATOR NEEDLEMAN (33RD): Well, thank you so much, I don't see anybody's hand raised. So, I appreciate your testimony. Will, next up?

WILL GINN: Next up we have Paul Corey, followed by Jeremy McDiarmid.

SENATOR NEEDLEMAN (33RD): Welcome, Paul.

PAUL COREY: Hi can you hear me?

SENATOR NEEDLEMAN (33RD): Sure, it looks like you have a dark room behind you, looks like it's a horror movie.

PAUL COREY: I'm sorry; no, that's Alright. Good evening Chairman Madeline, and Chairman, our Members

of the Committee. I really appreciate the opportunity to testify today, and support of raised Bill 952. With be any energy, we have the only braiding when project, and state, and call broke, and we commend the Committee for its efforts to promote all types, and every variety of renewable energy. We support Section two of the Act, which essentially directs PURA to create programs to promote energy storage systems, we would recommend though, that the Committee consider adding.

One of the criteria that would promote the deployment of energy storage projects paired with class one renewable energy sources, we think that would maximize the benefits of energy storage systems, and develop ways to really reduce the carbon footprint, and Connecticut. Then I also support section five of the act that allows the utilities to own certain solar energy projects, provided, though, we recommend that the language be revised to be more inclusive, and allow for private developers, to also make proposals and we believe it should be expanded to energy storage, and wind energy as well.

We've recommended some language in our testimony, so I won't go through that, but this approach has been successfully used before section 127, which allowed a pilot program of 30 megawatts of utility, and private developer owned projects. We believe the proposals, and the suggestion language that we've submitted would enhance the overall Program, it would accelerate, help accelerate the deployment of energy storage, wind and solar in the state, and really help Connecticut become a leader in energy storage systems into the future. And we think that's very important, because Connecticut, as well as, Rhode Island, and Massachusetts are sponsoring and entering into contracts with massive amounts of offshore wind, and that really brings the opportunity to co-locate those offshore wind resources with battery technology.

So, to have an opportunity to submit proposals for our current wind project, to co-locate with battery technology, will really help drive the technology, and improvements, and really set Connecticut on the right path, once those offshore wind resources come online. So, I think that's really the message here, and I'd like to wrap up, and welcome any questions.

SENATOR NEEDLEMAN (33RD): Thank you, Paul. Anybody have anything for Paul? Don't see any hands raised. Thank you so much.

PAUL COREY: Okay. Thank you.

SENATOR NEEDLEMAN (33RD): Thank you. Will?

WILL GINN: Jeremy McDiarmid followed by Noel Lafayette.

JEREMY MCDIARMID: Good evening, Chair Needleman, and our country, and Members of Committee, I appreciate your stamina and resolution this evening. I'm Jeremy McDiarmid, Vice President for Policy and Government Affairs at the Northeast Clean Energy Council or NECEC. We are a member organization with hundreds of clean energy companies across every segment of the clean energy industry in New England, in New York.

And today, I'm here to offer brief testimony for the swift passage of Senate Bill E82 and SB 952. We've issued some, we've submitted a written testimony as well, and so I will do my best to be brief. As the Committee well knows, the 2020s needs to be a decade of action in climate, and clean energy to support this transition that we all need to see, and that's why the zero-carbon electricity standard target by 2040 is so important, because it says a clear and bold commitment to establish the long-term direction that will give the clean energy sector added confidence to invest in Connecticut's clean energy future.

And the target is one part of the solution, but we need to have specific policies and programs, underneath that sort of big umbrella in order to drive that change, which is why we support the procurement provisions for demand response and energy efficiency in SB 882, as well as many of the elements in Senate Bill 952, were enthusiastic about the energy storage provisions in SB 952, because they set a tangible set of signals for the development of storage, and they complement the really good work that pure is already doing around energy storage.

Expansion of the virtual net metering program is another key element that we support; however, we would rather see the CAP remove rather than that raised. And that the last piece of flat, I'll flag, is we do not support the utility ownership provision in section five of 952, we feel that it would encourage an uneven playing field, and could decrease competition in the market to the detriment of repairs. We do believe that the utilities, need to be a key partner in the clean energy transition, but that the role of distribution of generation developed, it was properly and successfully deregulated decades ago, and should remain.

So, with that I will stop, and we would be happy to entertain any questions, thank you.

SENATOR NEEDLEMAN (33RD): Thank you, Jeremy. Anybody have any questions at this point? Thank you so much for being patient. Next up, Will?

WILL GINN: Noel Lafayette, followed by Chris Phelps.

SENATOR NEEDLEMAN (33RD): You're muted, Noel?

NOEL LAFAYETTE: Yes, got you. Thank you, Chairman. I just wanted to thank the Committee for allowing me to speak today. I've been testifying in front of this Committee pretty regularly for about five

years. I want to take a super quick second, applaud, and congratulate the Committee for moving SB 855 separation of pure, and deep out of Committee it's imperative to keeping rates down going forward for the next decade, and for keeping competition competitive, I applaud the Committee for.

Now, I just want to take a moment, before I move on number two, let's testifying to SB 952, there's been a lot of testimony, and this today, and I don't want to in the essence of time, I want to, don't want to repeat myself. However, I do believe for many years now, the reason this program has been constrained with caps and whatnot is that the Committee is very concerned about how it will affect the ratepayer going forward and you should be. We know that, it won't reach the fears that have been proclaimed. However, I think, a good concession, or agreement is eliminating the CAP whatsoever, okay, and allow PURA give pure a mechanism to review it every two years, here's why we're trying to drive, why pushing the brake pedal at the same time it's easier to drive, and then apply to break, when necessary pure has the rate expertise, the staff everybody at all the data that they could need, and they have the authority to demand the data from the etc.

I think that's a great compromise, rather than fits, starts, delayed, economic development, and federal, it say just give pure the mechanism to apply to break when necessary, you can mandate every two years, that would solve this problem once, and for all. I know this is for four years, and you're still all kinds of weird narratives, and different numbers, you know we waste a lot of time every year.

Let the CAP, let pure apply to break when it needs to, I think that's the final answer, and I think that would be good to be allowing that is to own solar, I think this is a very bad idea, many people have given many reasons. I just as if you look at Connecticut culture, political culture, around the ADCs right now. It appears that the public isn't

confident that they can do their core business, their core business is just distributing energy, in a cost-effective resilient way, and they're struggling to do that.

So, maybe we shouldn't give them additional business and responsibilities, I would concede we're switching to a performance-based system that we know it's being put together, and will be implemented, I would concede let that go on for a couple of years, and let them prove themselves, then maybe give them an opportunity, but let that happen first, right let them regain the confidence of the public. That's about it, and everything else has been relatively discussed.

On this one last closing comment, I heard mistakes, say we shouldn't use farmland, we should use brownfields. I have spent five years trying to use brownfields, I can tell you it is far, more complex, than anyone realizes, I hear that sentence, every day, and let me tell you it, is not simple, I will elaborate further at the Committee's request, or offline. Thank you.

SENATOR NEEDLEMAN (33RD): Thank you so much, no, I appreciate that interesting food for thought seriously. I don't see anybody with their hand raised. Will, who's up next?

WILL GINN: Up next, we have Chris Phelps, followed by Raphael Podolsky.

CHRIS PHELPS: Try that again, can you hear me now? Senator, can you hear me?

WILL GINN: We can hear you, Thank you.

CHRIS PHELPS: Alright, sorry, thank you, I had a little technical difficulty there. Thank you, I'm Chris Phelps, state Director of Environment Connecticut, and I'll dive right in, I want to do,

thank you for allowing me to testify at this very late hour.

At this point, we've submitted testimony on three Bills before you, and you know there's a common theme to our testimony, across all three Bills. And that really is summed up by the idea that you know, global warming and climate change present very direct and growing threats to our economic future, or public health and safety and, frankly, the stability of our society in the years and decades to come. And have all the facts about climate change, one is crystal clear, and that to stop it to mitigate the worst effects of climate change and global warming, we have to switch from our current energy systems to one, that's to an energy system, that's not powered by fossil fuels in the years to come.

We need to shift to 100% clean, renewable zero carbon energy and do it over the course of that most 1530 years. And that vein our testimony supporting Senate Bill, talks about each of the provisions of that Bill, that we support, and we make specific recommendations regarding Governor limits recommendation proposal, to commit to 100% clean zero carbon electricity by 2040s, has been talked about. I think, by other folks earlier today one of the challenges with the way, this is presented, is that, I know, it's not the intent of anyone, but it does on paper suggested possible, that we could have the outcome of having a procuring all of our electricity, from zero carbon clean sources by 2040.

While still allowing fossil fuel carbon emitting sources to continue generating in the state. So, towards the type of change, that really ought to be considered to prevent that, frankly, what we would view as absurd a hypothetical outcome from occurring, as well, we think, requiring some sort of interim benchmarks, between now and 2042 really encouraged an acceleration of the growth of renewable resources serving Connecticut in our



regional grid in this Bill, would be a smart way to go.

Again, working backwards from that goal of 2014 is one of the policy constructs; we need to move forward with. We've provided more testing on that Bill, but I'll touch briefly on our support for Bill 952, as well, we support. That Bill for a lot of reasons, but one big one is that we recognize that going big, and going to scale on energy storage, is going to be key to the modernization of our electric grid necessary to accommodate this transition over the next couple of decades said. I know there was a back and forth on that point, I think, was Center with Representative our county, and others earlier, and we agree, we need to do that, and this is one of the key ways to facilitate making that happen in Connecticut, and across the region.

And lastly, I'll just touch on it, we do testify in opposition to 6524, not because, we oppose fuel cells as a technology per se, but because, as again was discussed, at length earlier with Representative from fuel cell energy. There's a choice between consenting fuel cells powered by fossil fuels that emit carbon dioxide and would hinder us from actually achieving 100% clean goal and our climate goals, or fuel cells powered by renewable resources and that's what we recommend in our testimonial said.

The Committee in the legislature committed to trying to grow, the fuel cell industry in our state and deploy more fuel cells, as long as renewable resources power them in the years to come, that really is key on that specific point. I had some other comments, I wanted to make and response to things that have come up, but; I know, it's been a long day, so I'll stop there, and just answer any questions you might have.

SENATOR NEEDLEMAN (33RD): Thank you, Chris, appreciate all the input. Not sure I see anybody's

hand raised at this late hour. We appreciate your time and your patience.

CHRIS PHELPS: Go eat dinner now. Thank you.

WILL GINN: Next up, we have Raphael Podolsky followed by John Erlingheuser.

RAPHAEL PODOLSKY: Thank you very much, can you hear me?

SENATOR NEEDLEMAN (33RD): Well.

RAPHAEL PODOLSKY: As soon as it's better.

SENATOR NEEDLEMAN (33RD): It'll be fine.

RAPHAEL PODOLSKY: Alright, I'll try shout at my computer, I'm sorry, my name is Raphael Podolsky. I'm a lawyer, and a housing advocate, with legal aid programs, with Connecticut Legal Services and I'm here to speak, and Senate Bill Number 882, and particularly in regard to section three of 882 and supportive it. The sections three and four; three dealing with renters for dealing with purchasers of homes require that section three in particular, requires that the landlord know, either provide tenants with a certification rating number, based on the energy efficiency of the home, or any alternative to provide 12 months of data on what the amount of cost of utility usage has been in the previous preceding 12 months.

From the broader perspective of this Bill, the impact on climate change, that has the practical impact of incentivizing people to do this kind of energy efficiency improvements. To the point of view of the renter, where I'm really looking at it, it's really important if your utilities, or your heat are not included in your rent you'd be able to have a little bit of information about their, what they're likely to cost, because that's add-on to whatever you're paying. And this Bill is really

helpful in two ways, first of all, it says that the landlord needs to provide that information.

And second of all, it tells it permits the landlord to get the information. My first thought, when I looked at this section, was if the landlord is not paying those amounts, that's paid by the previous tenant, how is the landlord going to know what those amounts are, but it provides that the provider of the fuel, or the utility service can release that information, so that that can be passed on. And I can tell you from my own experience with people, I know that has actually been an issue, where sometimes mislead and misinformation, or estimates based on no knowledge are given to somebody, who's going to move into an apartment, and then they're very surprised, when they move in.

And they discovered that the utility Bills are much, much higher than they anticipated. As a tenant you cannot get that from the utility company, it will not provide it, in fact, the landlord, right now, could not get that from utility company, they'll treat that as confidential information. So, the Bill makes it possible to give to the tenant in advance significant information, it helps to make a decision, as to whether you want to rent a place, or not.

Obviously, the usage level of a new person may be different from the users' level of an old person, is not like a guarantee of anything, but it gives you some reasonable guideline to think about in advance, so I would hope. So, as I said, I'm supportive of 882, and especially involved in concerned about section three, and section four, that it puts the buyer have a home in an analogous position, so I would support that to. In my written testimony, I've suggested to you a technical amendment that I think needs to be made, it's got to do with, whether you use the word and, or in several places.

And just to make sure that the Bill means what it says in, what it means to say, so, I'd appreciate if you're moving the Bill forward to just take a look at the technic that technical note. Thank you very much for the opportunity, and testifying and I really appreciate the chance to spoken to you today. If I can answer any questions, I'm very happy to do that.

SENATOR NEEDLEMAN (33RD): Thank you, Raphael. I don't see anybody with their hand up at this point. So, thank you and have a great night.

RAPHAEL PODOLSKY: Okay, thank you.

SENATOR NEEDLEMAN (33RD): Thank you. Will, who we have next?

WILL GINN: Up next we have John Erlingheuser followed by Julie Smith-Galvin.

JOHN ERLINGHEUSER: Good evening, Mr. Chairman. Can hear me okay?

SENATOR NEEDLEMAN (33RD): I can, John.

JOHN ERLINGHEUSER: Okay. Thank you, Senator Needleman, Chairman Arconti, Ranking Members of the Committee. I am John Erlingheuser in the Advocacy Community, Outreach Director for ARP and Connecticut. I'm here to testify, on behalf of the 600,000 members of a European Connecticut, I'm going to speak about, I submitted written testimony, and two Bills. I won't go into great detail on that, I won't read that testimony, but I'm here to support two Bills, Senate Bill 951, and house Bill 5626.

Just quickly on 951, there's absolutely no reason why a solar solicitation should be treated differently than third party electric suppliers. We're running into the same types of issues with those solicitations, I'll say that the behavior of the companies themselves as much better, but a lot

of the third party agents that they employ to do those solicitations are creating a lot of problems with the particularly their door to door work. So, we fully support that, this piece of legislation, I'm sure it can be modified, but the intent behind it, should remain intact, which leads me then to 6526, and I just really thank PURA for putting this legislation forward in the chairs, for introducing it, and raising it for this hearing.

We just seem to have to come back to this issue, every year it's like a game of whack a mole with these third party electric suppliers. We've had issues with them continuously to us, the two strongest parts of this legislation that are in there, are the ending of auto renew contracts, and the elimination of the \$50 cancellation fees. We still have 25,000 people, that are on auto renewed variable rate contracts, that were banned in 2015, and those folks are sometimes paying 20, or more cents a kilowatt hour for their electricity.

And, you know, it's just, it's unconscionable that we should be in this position to have those folks, and other folks constantly get auto renewed into bad deals, and frequently the contracts are higher than they were when they started and the cancellation fees. Brenda Watson talked about how sometimes, it's better for those folks, to pay the cancellation fee, because they're getting ripped off so much. We run into folks that are low usage customers, a lot of seniors who are trapped into those contracts, because even the \$50, is too much for them to get out of, and the overage is not significant enough for them to be able to afford to pay the cancellation fee.

I just want to address a couple of things that were said by Dan Allegretti. Basically, he said a lot of things about how, you know, that they were being burdened, and so forth, I just have to say nothing could be further from the truth. And I, also, you know, I mean we just have to, why do we have to keep

coming back to this issue, every single year, if there was such an issue, and they talked about innovation, what are the innovations that third party suppliers have brought to the market, we've had that do major reforms in 2014, 2015, a marketing standard, and we're still running into the problems over and over again, nobody's going into the market for innovations, they're going into save money.

And the majority of people are paying more to the tune of some \$274 million since 2015, as far as a comment made by NRG, he referred to the standard service, Texas has no standard service. And there's a Wall Street Journal article that came out February 24, and the headline was "Texas electric Bills were \$28 Billion higher", and the deregulation Competition in the electric supply business promise reliable power more effective cost, we see where they are.

And he's asking us to have the battle about standard service again, which was a battle we want, I believe, back in 2013 and where they wanted to eliminate standard service. So, we would have no idea, what was going on, and then we could be like Texas, which is, I don't think, we're where, we want to be particularly with all the work you folks put in with the take back, our grid X.

So, with that I'll close we did some, detailed testimony our volunteers submitted testimony on our, how to choose an electric supplier program, she's not going to be able to stay, because I think, she's 95th. So, I just, I'm letting will uplift know that, as well, and I'm happy to answer any questions from all of you. Appreciate the time tonight guys in your patients.

SENATOR NEEDLEMAN (33RD): Yes, john! I just want to say that it's worth repeating, because it's so important, that the barrier of \$50, is a high barrier for low-income people, and they'd rather pay

\$10, or \$20 a month, more than try to come up with the \$50.

JOHN ERLINGHEUSER: They hit the nail on the head there, senator.

SENATOR NEEDLEMAN (33RD): It is scary, sad appalling it's all of the things it's frankly not only about this industry, it's a general statement, about where we are, and how many people just get by, and make one decision that they can't get out of for what most of us, many of us would consider to be a small amount of money. Just right out to checking it, out of it, but some people just can't, so I don't like these cancellation fees, I think that we need to get everybody out of these variables' contracts, as quickly as we can.

JOHN ERLINGHEUSER: Thank you, Senator. Appreciate that.

SENATOR NEEDLEMAN (33RD): Thank you. Are there are a couple of people who want to speak; Representative Meskers, followed by Representative Ackert.

JOHN ERLINGHEUSER: Praise people after dinner time, there we go.

REP. MESKERS (150TH): Accurate might have seniority.

SENATOR NEEDLEMAN (33RD): To swear to me that they're going to be short.

REP. MESKERS (150TH): Let's get Representative Buckbee seniority on this.

SENATOR NEEDLEMAN (33RD): Representative Ackert.

REP. ACKERT (8TH): And hopefully a short answer, john we've been working on this, since I've been in the Legislature, right. Tell me we've done something, you must have gotten less complaints over

the years, from what we've been doing, please tell me that, because of not putting words in on another piece of paper.

JOHN ERLINGHEUSER: And that's coming from a Representative, who we honored for his work, banning variable rates. But the short answer is, we are not, we were still getting a large number of complaints, fewer people going into the market, so you know, there's a correlation between fewer people in the market, and fewer complaints. You know, so this is that sounds like a phony baloney thing to suppliers are putting out there, all these. So, many fewer complaints, we're at 20% of the market in third party suppliers, as opposed to prior to the polar vortex in 2014, where it was over 60%.

So, complaints have gone down, because fewer people in the market, because, so many people have gotten burned. And so many people like ARP, and others are doing education about how to understand the market, not telling them to choose, or not to choose, to go into it, but just making them understand and they go, you know, what, this isn't for me.

REP. ACKERT (8TH): Thank you john, Thank you Mr. Chairman.

JOHN ERLINGHEUSER: And thanks for all your support, and work over the years, Representative.

SENATOR NEEDLEMAN (33RD): In the background Representative Meskers, Representative Cheeseman.

REP. MESKERS (150TH): Gianna, first, I want to thank you for all your advocacy. My initial contact with you, I think you were waving your hands, and scaring me in your advocacy, I was trying to figure out what was going on. And I think you educated me to the point, understand what we're dealing with on this process with third party guys, so I really salute and applaud your advocacy.



I want to work with you going forward on any other ideas, particularly we work on the separation with pure and deep. I want to talk about what the next step, but in terms of how you think we should approach the let the distribution Bill, and diverse just reducing costs. And where you think we could, you know, based on the membership, your country wide REACH, where do you think, we should be looking at to try to drive down the cost of distributed energy in the state; so, I really want to appreciate that.

JOHN ERLINGHEUSER: Thank you masters, and now I appreciate the fact that every energy meeting, or hearing, I've seen, or heard you bring up the fact that there are issues with the third-party suppliers, and that they need to be addressed. So, I appreciate your efforts on that, in that regard.

REP. MESKERS (150TH): Thank you.

SENATOR NEEDLEMAN (33RD): Oh, I think, it's all Representative Cheeseman.

REP. CHEESEMAN (37TH): Thank you, Chairman Needleman, thank you for being here john, as you know, one of my big concerns has always been the effect on ratepayers of decisions, we make both in the legislature and the Committee, and I just want to, given that Commissioner director said the Millstone deal will save Connecticut ratepayers \$5 billion dollars going forward absent.

The replacement of them with new fossil fuel sources, I just want you to reconsider your admin opposition to that deal, I know we heard a lot from you, about how this was going to affect your ratepayers. And yet me know going forward, that this is actually going to be a good deal, so I, you know, I'm with you all the way, and protecting our ratepayers. I'm a senior now too, I go crazy, yes, I had a constituent down the street saying she's electric key, and she had \$1,000 Bill.

So, I'm just giving you the opportunity here john, because your side.

JOHN ERLINGHEUSER: I appreciate your being on our side, on most issues, and most energy issues, I -- we had disagreed on millstone, I think there are still a lot of various to debate the impact of the Millstone deal. You know, if you listen to every source, a lot of the rate increase the proposing now. Well, and I'm not defending ever, you know, I'm not defending ever, so they're taking that side. I do think there's an impact, and rates on millstone, I understand why the state put forward the policy. But, I'm not ready to say, that I think, that was the right policy decision, I mean it would be the easy thing for me to come before.

The Committee particularly with yourself, and senator for me, can say, you know, I was wrong, I don't believe, I was, I still think there's an impact to repairs in that regard, in terms of rates, but; you know, I think we'll have to see how it plays out in the long run. So, I do appreciate your advocacy, and I do recognize and appreciate your sincerity, and your belief that it's a good deal, and you know we'll just agree to disagree on that.

REP. CHEESEMAN (37TH): Alright, thank you for your service, and thank you working for the people, who are in the, you know, most affected by seeing what we do, and the effect it has on their Bill.

JOHN ERLINGHEUSER: And I know you try to put the right pair, impact to the right pair, is always first, so I appreciate that.

REP. CHEESEMAN (37TH): Alright. Thank you, Chairman Needleman. Thank you so much John for being around.

SENATOR NEEDLEMAN (33RD): Thank you. No one else seems to have their hand raised, that was a flurry of activity. Will, who's next?

WILL GINN: Julie Smith-Galvin followed by Steven Winter.

JULIE SMITH-GALVIN: Thank you. Distinguished Members of the Committee, my name is Julie Smith-Galvin, I, can you hear me, okay?

SENATOR NEEDLEMAN (33RD): I'm perfectly fine.

JULIE SMITH-GALVIN: Okay, good. I am here today to voice my support for the Bills 882, 952 and 6523. I currently own a small communications firm that focuses entirely on energy, and the environment. Over the last 20 years, I have worked for a range of renewable energy companies, large and small, in Connecticut. And on the full range of technologies that you've heard from today, however, I'm here today to provide my perspective, as the public outreach lead on hundreds of hydro power plants over the years, throughout the country and the world.

In support of this technology, as I know, you've already heard from people before me, the important thing to know about small hydropower in particular, is that it is already reliably running, it is forming the baseline of the renewable energy and climate technologies that Connecticut is relying upon. It is climate friendly power, that is scattered in rural communities, and urban communities throughout Connecticut, and it's providing opportunities, and benefits, far beyond its clean power, including reservoir management jobs, property, taxes and other social and economic benefits.

The two points that I wanted to add, two people have spoken before me, is first hydropower is the only federally regulated generation technology in the country, what this means, is that many hydro power projects in Connecticut, and beyond are currently undergoing relicensing through the Federal Energy Regulatory Commission. And the what happens in

relicensing, is it's a long process with lots of input, and lots of stakeholder input, and that's a lot of what I've done with these companies.

And what happens is we end up balancing the regulatory, and environmental requirements, against the power and what really needs to happen with these hydro power projects, in order to keep them viable, is to balance those, to make sure that the regulatory, or environmental costs around things, like fish ladders, can be recouped, so, that these facilities can continue to operate, and not a road the baseline for Connecticut. The second opportunity that is currently happening is a national conversation around hydro power, and climate, and I really encourage Connecticut to get involved in that to become a leader, and to put hydro specific programs in place like your neighbors.

So, in my written testimony, I have attached revisions to the said Bills that I think really would help promote hydro power, and keep that baseline secure, thank you very much.

SENATOR NEEDLEMAN (33RD): Thank you so much Julie, I appreciate that, anybody have any questions? I don't see anybody's hand raised. Thank you for your patience tonight.

JULIE SMITH-GALVIN: Thank you very much.

SENATOR NEEDLEMAN (33RD): Will, next.

WILL GINN: Next, Steven Winter; and then we're going to go to Louis.

STEVEN WINTER: Thank you, Senator Needleman, Representative Arconti, and Members of the Energy and Technology Committee. I'm grateful for the opportunity to testify, before the Committee, thank you for all your time and attention to these

matters, and for your service to the state of Connecticut.

I'm here to voice my support for SB 882 in particular language requiring landlords to disclose potential energy costs, or energy costs potential tenants. As the order for the 21st word in new haven, I have seen how the great burden of energy Bills, particularly on constituents in the inner city can affect their budgets and sometimes lead to homelessness this Bill will incentivize landlords to make investments to reduce this burden, and give the transparency needed to tenants to make better rental decisions.

I'm also supportive of the language for the demand response, and demand response procurement, I would encourage the Committee to amend zero carbon electricity goals, and to try to strengthen them. I worry that the provisions in here, will still allow for a large amount of fossil fuel generation in the state, to continue to support consumers in other states, as has been touched upon today, this is a regional problem. But I worry that focusing on the energy, that's applied to consumers rather than the generation, here in Connecticut, will not do enough to eliminate greenhouse gas emissions, I know the issue was raised about the feasibility of going completely clean, to completely clean energy.

And I wanted to point Committee Members to the report by UC Berkeley, and grid lab that 2035 report, which highlights how the country, and regions can get to 90% clean energy by 2035 with no new gas plants. And so, in that vein, I think that this legislation could be strengthened by, you know, prohibiting development of new gas plants.

And then, with equity in mind, I think, we need to, you know, acknowledge that this is a decisive decade for climate action, and that our decisions today, will determine how our neighbors, and Connecticut, and across the nation in the world, are impacted by

climate change. And as an equity issue, similar to the pandemic those who will be most impacted, or those who will have the least means to bear the impact.

As one of the wealthiest states in the wealthiest country in the world, I think we should do more, and to ensure amend the 25th goal to require complete decarbonization of our economy on Bill 6523.

WILL GINN: Remaining.

STEVEN WINTER: I've seen things, I've seen how the city of new haven has been constrained, much like other municipalities, by the net metering CAP. After listening to the testimony of others, I think the suggestion to remove the CAP, all together, and establish a tariff for purity yourselves, a tariff would send a strong price signal. And that seems like the smartest adoption to beating virtual net metering adoption. Thank you so much.

SENATOR NEEDLEMAN (33RD): Thank you, Steve. I appreciate all that. I think we all feel that transitioning to a competitive tariff on virtual net metering is the right way to go, just, we have to get there. So, under percent supportive, I don't see anybody's hands are raised.

Will, who do we have next?

WILL GINN: Next, we have the Louis Rosado Burch followed by James Schneider.

SENATOR NEEDLEMAN (33RD): Did you miss Amy, or she's...

WILL GINN: She's -- at least that, I've seen she's not here.

LOUIS ROSADO BURCH: And I believe Amy testified already today.

SENATOR NEEDLEMAN (33RD): Oh, okay great, thank you.

LOUIS ROSADO BURCH: So, thank you Senator Needleman, Representative Arconti, Distinguished Committee Members. Thanks for the opportunity to testify in support of Senate Bill 882, Senate Bill 952, house Bill 6523, and in opposition to Senate Bill 915.

My name is Louis Rosado Burch, program director, as Citizens Campaign for the Environment, we've heard a number of times the impacts of climate change are well documented, and are evident in our Communities; don't need to spend a lot of time on that but I am happy to elaborate on those points. We know there's no debate, every major scientific body acknowledges the role that fossil fuels play in this crisis.

In fact, Connecticut Attorney General William Tom recently filed a lawsuit against Exxon Mobil, for Exxon's role, in suppressing sound science confirming the relationship, between fossil fuels and global warming. This demonstrates an understanding of that central role fossil fuels play in the crisis, and the state's energy priorities should reflect this reality as well. So, we certainly appreciate the Committee's efforts to move us in the right direction, but; believe it's fair to say that we can, and must do more.

So, specific comments on the Bills, CCA support Senate Bill 882, we need to move forward with codified the Governor's 100% carbon free goals. But this requirement must apply to electric supply, and generation, as written the Bill only limits carbon emissions from electricity supplied to electric customers in the state. This is nothing to reduce harmful air emissions from fossil fuels burn in our state does little to promote meaningful reduction in greenhouse gas emissions across our region.

CCA also strongly supports efforts to promote responsible solar development, this is critical in particular to advance distributed energy solutions, which promotes job creation, and improve resilience across our electric grid. It's critical, however, that these benefits are made available equitably to all rate payers, and not just a handful of large generators, happy to expand on that, as well. We also support Senate house Bill 6523, we urgently need to increase community access to virtual net metering credits, particularly in distressed municipalities. However, simply adding new participants without raising the CAP, puts ratepayers in direct competition with municipalities for those credits,

The Committee should pass 6523, and eliminate the cap on virtual net metering at the same time, to ensure fair and equitable access to these programs. We also oppose Senate Bill 950, for all the reasons that a number of municipal tree wardens have already laid out in their testimony. This also undoes years of advocacy from citizen activists, who have worked to ensure transparency, and oversight in tree trimming in our state.

Finally, I want to just take the last few seconds to point out, that there has been a groundswell of support recently for a moratorium on fossil fuel infrastructure projects, and our state. Wrapping up, we cannot meet our clean energy goals or, make meaningful progress on combating climate change, we continue to build large fossil fuel burning power plants. We know, the Committee has received several hundred calls, and emails asking you to bring forward Senate Bill 718, to establish a moratorium on fossil fuel infrastructure, we believe that concept deserves robust debate before the Committee, and respectfully ask Committee leadership to bring this Bill forward for a public hearing.



With that, I will conclude my comments, and happy to answer any questions that Committee Members may have.

SENATOR NEEDLEMAN (33RD): Thank Louis, Thank you Louis. I don't see anybody with their hand raised. I really appreciate your testimony tonight.

LOUIS ROSADO BURCH: Much appreciated. Thank you, Senator. Everyone have a good night.

SENATOR NEEDLEMAN (33RD): Thank you. Will, are all the Kimberly-Clark people gonna speak at the same time?

WILL GINN: I guess, we can say James Schneider is up next from Kimberly-Clark.

SENATOR NEEDLEMAN (33RD): You guys want to do it all at the same time?

JAMES SCHNEIDER: Yes, please.

SENATOR NEEDLEMAN (33RD): Okay, so Will let 5859, James Schneider, Susan Bruce, Bruce Parker, that's great.

JAMES SCHNEIDER: Thank you, Senator, and, as you know, my name is James Schneider with Kimberly-Clark, and with me tonight is Susan Bruce our energy council, and Bruce Parker our finance manager.

SENATOR NEEDLEMAN (33RD): We're really not seeing you James; we're just seeing like a little bit of your head.

JAMES SCHNEIDER: Oh.

SENATOR NEEDLEMAN (33RD): Your camera! There you go.

JAMES SCHNEIDER: That better.

SENATOR NEEDLEMAN (33RD): Yes.

JAMES SCHNEIDER: I can't see myself, sorry about that.

SENATOR NEEDLEMAN (33RD): I know, I understand.

JAMES SCHNEIDER: Okay, so, as you know, our mill employees more than 350 highly skilled workers to produce an essential product, Kleenex facial tissue. We appreciate the opportunity to address the Committee tonight in support of HB 6527, which proposes to increase Connecticut's Class three RPS from 4% to 5%. The Bills recognition of Connecticut's Class three-supply demand and balances timely, although we do suggest a targeted modification to the proposed sunset provision.

Connecticut seeks to achieve a net zero carbon electricity sector by 2040, and Casey shares Connecticut's commitment to carbon reduction. As evidenced by our investment in CHP at several meals across the country, as well as our corporate sustainability goal for a 50% reduction in GHD, both scope one and two by 2030. In fact, our New Milford CHP investment has resulted in a net annual reduction of 8500 metric tons of GHD.

And then, it gets a Connecticut's Class 3 Program has been recognized for encouraging CHP development, and capital investment characterized by high efficiency, reliability and resilience benefits.

Classroom direct revenue, is also vital to us to defray the CHP ongoing costs. However, Connecticut's successful program, plus a static 4% Class 3 RPS requirement has resulted in a saturated Class 3 program. Class 3 RPS currently trade at the floor price of \$10 dollars, if they can be sold at all.

Reasonable forecasts indicate to us that the Class 3 oversupply will not improve anytime soon, in fact, this dynamic could be amplified, if Senate at Senate

Bill is an active because it appears that would further exacerbate the supply demand imbalance without modifications to the RPS so we believe, increasing the Class 3 RPS from four to 5% brings a 15-year-old incentive for it, in a measured way that should result in a more balanced market.

We firmly support the Bill, Casey does have reservations; however, about the temporary nature of the class three increase for only three years. A temporary increase in the classroom requirement, nor is the forward nature of classroom direct sales, which we also do it, also ignore, as a potential increase in class resupply with the passage of Senate Bill 882. Temporary measures to bolster the classroom incentive may, in that event, fall short in the long game of economic development.

WILL GINN: 30 seconds remaining.

JAMES SCHNEIDER: For these reasons, Casey supports the Bill, with an amendment that supplants the sunset provision, with language authorizing DEEP, to review the state's RPS, and recommend to this general assembly any adjustments necessary, based on that studies empirical findings. One thought, we had in mind is maybe that would be done under the 2026 IRP process.

Thank you. And we look forward to any questions.

SENATOR NEEDLEMAN (33RD): Thank you, James the 300 employees up there, they've been around with the company for a long time.

JAMES SCHNEIDER: Bruce?

BRUCE PARKER: Yes, Senator are 350 employees, mainly good high paying jobs, our employees range from 22 to, you know, 70 years old, the majority of them have been with us for their generation, and we've got plenty of examples of three generations all working at the same time.

SENATOR NEEDLEMAN (33RD): Thank you, I only asked that question, because, I think, it's important to understand that, as we move forward towards our goals, which we all see are important, I want to be very careful, you know, I want to see, obviously, the company do everything it can, to work within our framework. And we obviously know that Kimberly-Clark has a large public company, with options, but we want to see you guys work together with us, to meet our goals, and your goals, and keep those jobs in Connecticut.

These are the kinds of jobs, you know, these are the range from blue collar, white collar, there they're all income levels, and it's very important than that, we don't lose like a see manufacturing plants and Connecticut at this point. So, I appreciate that.

With that, I'm going to turn it over to Bee.

REP. BUCKBEE (67TH): Thank you, Mr. Chair, it's good to see. I've been very quiet today. I've been trying to be very quiet here sitting back and taking it all in. And if you notice, I had to do this because I've been seeing represent stuff up all day, so this had to happen. With the 2004 Red Sox stuff that's all, so that's that signed by the entire 2014 roster to you by the way, just say it up. So, thank you so much for taking the time to echo what senator Needleman said.

It -- Kimberly Clark is such a huge part of our Community, and New Milford the 350 people, how many do, we know, by name that are part of the Community as well, so we appreciate that. In fact, when the plant opened in the 50s that was, I think, was my father open was a plan, when it first started before, you went on to the post office. So, it's been a big part of this Community, and I want to make sure that we hear everything that you need to

say about that my concern, is, I'm sure yours, the sunset provision you touched on a little bit.

So, if that sunset provision comes through, how does that affect your Class three directs in selling those rights.

JAMES SCHNEIDER: Well, I guess, we kind of look at it from maybe describe it as a whipsaw effect right, I mean we sell I REX into the future, in fact, three years out. Three years forward, I'm selling records right now, three years out, so if there is uncertainty about what that market is going to look like in three years, i.e., a sunset a hard sunset. I'm going to find it, difficult to sell those wrecks at anything above the floor, if the buyers recognize that this in fact will sunset in three years, she, I'm saying.

REP. BUCKBEE (67TH): Yes, absolutely, I think that's, I like the idea of reviewing it as well down the road. I mean, we're all predicting the future here, it's tough to know, what's gonna happen in three years, four years.

JAMES SCHNEIDER: Yes.

REP. BUCKBEE (67TH): If that does happen, how does that affect the New Milford facility in the future of that, if it's not balanced out more on the, you know, on the wreck, and so.

JAMES SCHNEIDER: And Bruce can speak to that, as far as how that affects her Sandra Bullock?

BRUCE PARKER: I can take that on. You know, it is no secret that Connecticut manufacturer's faces very challenging energy costs environment. Several years ago, Kimberly Clark made a real, significant investment in CHP, it was also an investment in our awesome paper makers, those jobs and that allowed us to level the playing field. With our sister sites,

that produce paper in states, that have far lower costs.

Without a balanced market, with predictable results, the classroom market, there really isn't a viable business case, for future CHP development, and for existing operators like ourselves. We've sort of find ourselves, once again right back, to where we were before, we made our big investment, and that is, that we're struggling to stay competitive. Really, because of a very high-energy costs environment, so, it's why we're so adamant about doing everything, we can to get the market back balanced, and the way it was designed to be operating, when it was established.

JAMES SCHNEIDER: And Representatives, I mean Representative, I would add that you may find three years from now, if you decide to go with a three year review process of sorts. That because of SB 882, you may find additional Class 3 racks being brought into the market and you may want to reconsider increasing that percentage a little more, in order to keep the market balance, I don't know what the future holds, I don't know what will happen with 882, but you know that's another scenario, that might want to be considered here three years out.

REP. BUCKBEE (67TH): And another reason to not try to predict the future, but and review it at the time.

JAMES SCHNEIDER: Yes.

REP. BUCKBEE (67TH): No, I thank you very much. As everyone on this Committee should know to, this is why the referred to notice tissues, but it's Kleenex, because this is something that Connecticut to be very proud of the work that Kimberly Clark has done. And again, such a huge part of the Community, and we want to be able to support you, as best we can, I agree with Senator Needleman, that we do need to stay on course, to stay on track, to what we want

to do as a state. But, in the same respect, we need to make sure we're looking out for those businesses, who are within, not just within Connecticut, but; as I have to say them, but; on all day within the best town of the USA, making next year, we need to make sure, we stay on top of that, to make sure you guys are happy, and stay here and want to grow your business here, as well.

So, I thank you for your testimony, I appreciate you, waiting all day, but also, it's been a long day for everybody here. But I appreciate you taking the time, and that's why I waited to say too much till the end of the day, I didn't. I think if I started early and represent our county would give me a hard time with his with his Danbury stuff, and I wouldn't be able to get through it, so waiting for the day.

I appreciate it. Thank you so much for your testimony. And Mr. Chairman, thank you for your time.

SENATOR NEEDLEMAN (33RD): Thank you. Representative Arconti?

REP. BUCKBEE (67TH): Point, Sir; it's a valid point. We can discuss it.

REP. ARCONTI (109TH): Now, thanks for sticking around guys, and thanks for your testimony. You know, I want to align my comments, and thoughts with the senator Needle, manager some comments on, you know, the thought process of the three year increase in the Class 3 wreck. As a temporary increase to support the investments that, you know, Kimberly-Clark and others, you know, have made in the Class 3. But also, in that in between time, you know, the comprehensive energy strategy proceeding, you know, is coming up in a year, and the temporary increase in the market, it allows DEEP to explore alternative approaches to supporting, you know, combined heat and power for companies like yourselves.

So, you know, there's nothing saying that, you know, If the legislature doesn't like the direction of comprehensive energy strategy, we can revisit the Class 3 market again, no further putting out into the future through the increase, so the classroom market can survive. But also, you know companies, you know, Kimberly-Clark may love an alternative approach that's more sustainable, that DEEP could come up with in the comprehensive energy strategy. So, that's also, you know, part of the rationale behind the temporary increase, at least is to give an opportunity for all those discussions to happen, and to get your input, you know, not only Kimberly-Clark be to get all the hospitals, and other manufacturers, he's combining the power, put in as well.

Mr. John, Thank you.

SENATOR NEEDLEMAN (33RD): Thank you, Mr. Chairman. I just see Senator Formica put his hand up.

SENATOR FORMICA (20TH): Thank you, Mr. Chair. I just would like to align my comments, with both the Chairman and certainly, the good Representative, but being support of this great business and, you know, trying to move forward to make it, you know more viable, because you seem to be doing, you know, everything you need to do to take advantage of, you know, the opportunities that control your costs.

I don't have specific questions, but I want to make sure that you, after waiting all day have said everything, that you would like to say, if there's any other thing you'd like to add, that you think it'd be important for the Committee to consider Representative, buckwheat did a good job, asking some questions. But, is there anything else, that you think, we should consider in terms of anything timing, or whatever.

JAMES SCHNEIDER: I don't have anything directly related; I would just commend you all for. I heard



a lot of comments today, about the evolution of hydrogen, as a fuel, and I would just mention to you all that, as part of our overall sustainability goals. We, Kimberly-Clark, is looking at talking to some of our suppliers CHP providers, tissue machine providers, and at how the evolution of hydrogen could supplant the use of natural gas in whole, or in part. That's a long journey, we see it as a long journey, it's not going to happen in the next five years, but; we're encouraged by what we've seen to date with the development of green hydrogen, and look forward to analyzing network.

SENATOR FORMICA (20TH): Alright. Well, thank you very much, I know you have some great advocates up there in your neck of the woods with Representative, but be and Senator minor, and we will do whatever we can, to make sure that your continued to be viable. So, we just have clinics all over the state of Connecticut that's all we need, and beyond. So, thank you, Mr. Chairman. I appreciate it.

SENATOR NEEDLEMAN (33RD): Thank you, everyone. Will who's up next?

WILL GINN: Up next is Mike Trahan followed by Cela Bernie.

SENATOR NEEDLEMAN (33RD): Not hearing you well, Mike. Not quite! Why don't we jump to the next person, and give you a chance after that, Alright.

WILL GINN: Next up would be see Kevin Barber. But I actually think they're not here.

SENATOR NEEDLEMAN (33RD): Kevin Barber is gone?

WILL GINN: Yes, he went early.

SENATOR NEEDLEMAN (33RD): Okay, great.

WILL GINN: Next, would be Mary-Michelle.

SENATOR NEEDLEMAN (33RD): Okay, Mary-Michelle after, we'll go back to Mike. Okay.

MARY-MICHELLE HIRSCHOFF: Am I on now.

SENATOR NEEDLEMAN (33RD): You are

MARY-MICHELLE HIRSCHOFF: Okay, it's actually glad to call me Mikey, because, it's really Mary-Michelle that's a mouthful and that's how people know me. I am, I'll say good evening to you all, and thank you for your stamina. I am the spokesperson on trees and power for The Garden Club of New Haven, and I've been involved in these issues since 2011, and the two storms panel, I was part of a group that negotiated and drafted, what became 16234, like written a lengthy statement. And I hope that it helps you understand the policies behind it, and how it's worked well in order to achieve reliability, protect the tree canopy within the public right away, and serve to make sure that the earnings and the removals of trees serve reliability.

I'm not going to summarize that, I'm going to address the comments, that I've heard so far, I will know, that I'm very happy to hear, that the Bill will not go forward this is SB 958, sections two and three, as drafted. And, but I, and I would like to ask that, when you have your discussions with utilities, as to how it will be redacted that you include those of us, who participated in negotiating and drafting 16234, with the utilities, so that we can address the questions and reach mutually satisfactory agreement, as we did with 16234.

I also, that would give me an opportunity, and the other members, who were participants in that group, to address some question for the Rose for me, with regard to the testimony by Mr. Kerry. So, that I can better understand, what he thinks the changes for that made for problem, because we do not recognize what he was talking about. I appreciate the comments by shared Needleman, and by for

selectman knickerbocker that focused on the need to get rid of hazardous trees. That is a policy that the garden Club in New Haven has followed for some time that's been our policy.

And I'd like to read to you the definition of a hazardous tree, and 16234 a hazardous tree, is any tree, or part of the tree that is dead that's something that first selectman knickerbocker mentioned extensively decayed, or structurally weak which, if it falls would endanger utility infrastructure, facilities, or equipment. And, and the Statute provides that within the right of way the public right of way the three wardens, or if not, if it determines that, or three his father does.

No notice has to be given to the budding property owner, there's a board and can decide that, if it's on private land within the utility protecting zone, which is the main subject of this statute, utility is required to make a reasonable effort to notify the private property owner three days prior to pruning, or removal. It appears that the main focus of German native on in the rest of the Committee, perhaps, is on preventing the kinds of free caused outages in the major storms.

And I'd like to call your attention the fact that if you just deal with how to dis trees within the up, or the public right of way where the wires are located, you're not going to really prevent the kind of damage that occur during major storms that cause the long power outages, that we've endured. I've endured every one of them, where I live on. So, I do have studies, that I can present to you that demonstrate, that trees outside of the European city, outside of the public right of way have to be removed, and that is something, that I think this Bill should focus on, and protect private property owners' rights. But, the UPC the remembering that happens within the UPC is working well, there been no mediations, no appeals to pure.

If you look at the reports that are presented in the in the statement you will see that I thank you for your attention, and for staying around all this time. If you have any questions, I'm happy to answer them.

SENATOR NEEDLEMAN (33RD): No question just a couple comments Mikey, thank you for that. So, on to use that name, but; I absolutely agree with you, there are tens of thousands of trees that are making our power grid more vulnerable, some of which are in the right away, and some of which are not. Contrary to some myths out there, they are not all kept, just because people want to keep them, a lot of people, who are homeowners can afford to remove them, when they're on their property. And I'm not against some kind of a program, that affords people a little more help with that, because remember, we're moving like a freight train towards all electrified future and you drive over Connecticut today.

Unlike in 1938, when we had the last category three hurricane, we were largely grazing land, and in 1938, these forests are all mature these trees are all 75, or 100 years old. At this point, and they are a hazard to an electric with that will go out more frequently, you know, if it was the once every 10, or 20 year issue, I would be less worried. Because we can all put up with it once although not if we're dependent on it for heat and transportation and normal electric usage but it's a 50 mile an hour wind. Now, we have multiple species of trees that are dead, and dying, every day I drive around in the summer, and trees that were, you know, perfectly healthy at the beginning of the summer again by the end of the summer, there's a difficult, and it was gonna be more tree trimming blast.

I think that the smoothest path to getting that done, that works for everybody, I don't want to like my shot over anything, but backbone circuits, 20% of the circuits that are really, you know, not your

trees, on your call the sad. But the ones that come out of transformers that feed them entire piece of town grid, on multi town grid are really dangerous, and we just can't afford that, you know, somebody spoke about what about those illnesses after a storm the bottom line is what's the middle. Three towns that one circuit, and we just need to be careful that we don't, I'm gonna shut it down, at this point, just make sure that we have another were 2/3 two thirds of the way to the list, and we're nine hours into it.

MARY-MICHELLE HIRSCHOFF: What I would appreciate, if there was more than, I would like to say that I would appreciate it if we could be included in the discussions. Because, I have some comments about that, and also some comments that I might be able to offer with regard to under which I've studied.

SENATOR NEEDLEMAN (33RD): Anything you can submit would be very helpful. Thank you so much.

MARY-MICHELLE HIRSCHOFF: I would do that.

SENATOR NEEDLEMAN (33RD): And send it to the Clark. Thank you.

WILL GINN: Well, why don't we try Mike.

SENATOR NEEDLEMAN (33RD): Mike, yes.

MIKE TRAHAN: Little better, Senator? is this better?

SENATOR NEEDLEMAN (33RD): Much better, Mike.

MIKE TRAHAN: Terrific thanks for your time Senator, Members of the Committee, on Mike Trahan with solar Connecticut, the solar industry, business group in the state some of our Members sell solar door to door, some of our Members are very much involved in the virtual net metering program here's, some here to testify first on Senate Bill 951.

You've heard from three of our Members, who sell door to door sun power, it will speak later tonight, that they're all be presenting testimony. That they play by the rules in the cities, where they work, we're not sure, we're not aware of any widespread issues, although we are happy to sit with the drafters of the Bill. To correct some of the deficiencies there, I think the best thing, if it's okay, with the Committee is we pulled some of our Members together and sit with the Bill drafters, and see if we can come up with some language, that the Committee might entertain, if that's okay with you, we're happy to get involved in that process.

And Senate Bill 952 you've heard from a lot of developers from municipal officials all have asked for the CAP to be lifted. You see the list of cities, and towns, and my testimony all of those, who've asked for credits over the last year, or so. None of them are really going to be in line to get a credit this year, list the Bill has changed from its current form. We support equal access for credits, so, Connecticut is proposing a three year lifting the CAP with APR a docket ordered in your to. In fact, you've heard from the old Lafayette earlier you discuss the that organization has talked about.

Perhaps sending this issue over to Peru and live there right making experts deal with this one, I could understand, certainly the hesitation that the Committee has had in previous years and lifting the CAP. There was no value of DER at that time, but there is now, and that DER study, showed that the more soul your put on the grid through virtual net metering, the more customers benefit. That's not us saying that's the value of the DER study, that this Committee ordered a couple of years ago, it's a bipartisan issue there's six legislators from both parties, who filed Bills and virtual net metering this year. We feel the time has come to lift the CAP, at the end of my testimony; I've included a number of news clips that speak to successful

virtual net metering relationships, between cities, towns and developers. In Section 5 of the Bill, the EDCs ownership of solar, I don't think you've heard much in the way of support for the concept, I will provide any.

In Section 8 and 10, contain both vague languages, we think on consolidating the solar energy programs in the state, and expediting solar permitting on farmland. I'd asked the Committee respectfully to consider fleshing out the language here, so; we can provide helpful and educated comment, I would offer our members to any member of the Committee, who wishes to better understand some of the issues, that we brought up today, and pricing us for his virtual net metering goes, or.

The value of the DER, study how it was done with still left to do, we also support Bill 6523. But, feel that adding another participant to a crowded virtual net metering pool doesn't do anyone, any good, under the current Bill, only a quarter of those companies in the queue, really have a shot of getting a version of return credit this year. I would like to make a play, if I could, the virtue net metering Bill has it made a public hearing yet, for Energy Committee, I will hope of the hopeful that the chairs decide to do. So, the program is going to shut down, and 60 days, it would be the first time that we've shut down solar sails in the state, since the program started ten years ago, we'd love to work with the Committee to find a conductor.

As Senator or Representative have mentioned earlier, had an interest in Bill language that provides property tax revenue to virtual net metering project hosts municipalities have, such a Bill has kind of bounced around the planning development Committee, the last couple years, it's back again this year. I'm happy to forward that language to committed that so.

SENATOR NEEDLEMAN (33RD): Thank you Mike appreciate it, I am aware that Bill, I think it's a little different spending, Austin Western has proposed to Bill in multiple Committees because there are projects from Western Connecticut that are located in eastern Connecticut, and the developers have kept the megawatts below five in order to avoid property tax. And, she's pretty adamant and I tend to agree with her, that any project, that is a grid scale project, that is not being used on site primarily, should pay property tax at some rate, and you know, and I don't think you guys are opposed to that.

MIKE TRAHAN: No, in fact, we bet we proposed language to Center Austin, that's, it's how, it's done in Rhode Island, those, it's called a uniform capacity tax. It is an arrangement that actually works better for everybody developers know ahead of time with that payment is going to be before pilot payment, low taxes discuss later on. So, we'll be, as helpful as we can, whenever you need us.

SENATOR NEEDLEMAN (33RD): I think, we would do it for an installation, is that, are in aggregate five megawatts, or less that over five megawatts, the assessor has, you know, the deciding factor. And we don't want to put our finger on that scale, it's just we're the ones where it appears that some of the developers had figured out a way to game it and put 31 megawatt, or 31.5 half megawatts installations, on adjoining lots, are on the same block and meter them separately, and that's just not Okay. So, thank you. I don't know but Representative Ackert has his hand raised.

REP. ACKERT (8TH): Hey, give us a chair and Mike, good to see you, just a quick question, I just read your testimony here in part, and you talk about the energy savings by the municipalities of being in the \$1 million to \$2 million range, is that, obviously, something that would definitely benefit the property tax payers, and stay in the in those communities correct.



MIKE TRAHAN: Well, you're right, the property owners, the taxpayers in town pay the electric Bill. I think you mentioned that earlier Representative, so; and anytime you're passing, you know, cost savings on, to a municipality, if you reduce their municipal electric Bill. That Bill gets paid obviously, by the local taxpayers, so they're benefiting on that, as well.

SENATOR NEEDLEMAN (33RD): You're muted.

REP. ACKERT (8TH): You're muted, oh! here you go there, we go, I muted myself. I tried that, I tried to keep off screen, I try to mute, as much as possible, so that too much, this time. So, notice, one of the backs that up, and just say that might my community. I know, we have, I think three projects in the queue waiting going nowhere, and I think there's other people on this Committee that have the same in their community. So, continued efforts, and I want to thank you for your very complete testimony, and the information you provided us today.

MIKE TRAHAN: You welcome, thank you.

SENATOR NEEDLEMAN (33RD): Thank you.  
Representative, Arora.

REP ARORA (151ST): Thank you, Mr. Chair for the opportunity, thank you Mike for your excellent testimony. You know, I just had a quick question, which is, that you know the virtual net metering has been quite a success in terms of getting a lot of interest from developers. And be heard from a specific one developer, who was here earlier that you know, perhaps, if we unconstrained the megawatts, or and perhaps even, you know, with the discussion was around pretty close to unsubsidized numbers of 10 cents, or 11 cents, we could get quite a large build out perhaps 1000 megawatts to 1500 megawatts.

Now again, you know, you work with several, you represent and work with several developers in the industry. Would you talk to the exciting possibility, that if we did such an unconstrained program perhaps? How much development we could get in that to maybe at very aggressive or very compelling costs for the state of?

MIKE TRAHAN: the signals being sent to developers, right now the developer commercial developer community is of constraint programs and we've lived with that for years. There's not the kind of runway there, that they see, that allows them to build more robust businesses to add staff, to add crews, to start building bigger projects, and becoming more successful hiring, more people and putting more solar.

And, you know, we have argued for lifting CAPS and certain programs, and I tell you, we were not very encouraged by the by DEEP's IRP. That says that are high point, or high water mark over the last couple of years, should be what our future goal is five years from now, you know, we we'd like a chance to let the market work. The people here, the skilled workers are here, the demand is certainly there, the private capital is parked at the border waiting to come in.

All we need is the green light from the legislature, to take the handcuffs off our programs, and let's get moving faster and bigger.

REP ARORA (151ST): Oh, thank you very much, and would you also agree, or would you give an opinion you, give your input. As if we had larger programs, that prices would come down more, let's say, if we had, we were doing 1000 a year, or a larger number, you know, maybe we don't need to put any subsidy, because with higher volumes and scale. You know, you do get more and more economies of scale, so perhaps, you know, instead of making some 30 year

programs, our objective should be to give a green light, now in scale.

Would you think, that these prices could come down more, if we increase the sizing of our industry?

MIKE TRAHAN: You know our members are building in comparison, small and medium sized projects, our members are not the ones are doing. You know, the 50 megawatt type projects, or hundred megawatt type projects, those projects are done by national companies that parachute into Connecticut, and do a job and do it well in many cases and then move on. Our members, here are really doing the one megawatt, two megawatts, you know, inside of 10 megawatts sized projects. But there are plenty of areas, to do that and in, you know, I know you've stressed, you know the issues, you know, we spoken before about incentives part of the way, to achieve better pricing, is to reduce costs by the installers the developers cost.

The Internet connection is a huge cost, and you know, one of the things that, you know, and a lot has been said about the APR chair, APR have made a terrific ruling a couple of months ago. They approved the plan that we put forth to have developers' engineers, from developers sitting down with the utility, utilities engineers and working out problems, keeping small problems small, and allowing us to do work for less cost. So, we can achieve the sort of scale, we can achieve to help drive prices down, if some of the regulation is gotten out of the way.

REP ARORA (151ST): I really appreciate that input, because; I think it's good for the Committee, and the public to hear that, you know, solar is basically cost competitive in everything, and we may not need subsidies for a long period of time, but we do need to give them more green light, and reduce regulations, and impediments in their way. And I thank you for advocating, for that, we're big

supporters that public private non-subsidized prices, where we use it's exciting to hear that you guys are nearly the developers, are nearly there.

And I think it's an, I think, I speak for all, when we say we, it's very exciting to hear that you might be able to near term, if we give the encouragement and the signal develop substantial amounts. At unsubsidized pretty close to ten, we're talking about ten, ten sensors. So, once again, thank you for your advocacy, and look forward to speaking to more on this, thank you.

MIKE TRAHAN: Thank you. We're ready to compete.

SENATOR NEEDLEMAN (33RD): Thank you.  
Representative Arconti.

REP. ARCONTI (109TH): Yes, thank Mr. Chair. Just a quick like you guys, are active participants right and in the next docket, with pure -- with the -- for the C&I Commercial term, you know, come July.

MIKE TRAHAN: We are the next per technical meeting is the 10th, we have submitted comments into that docket a number of our members have submitted individual comments. And we're ready to get moving, I think that at the speed at which APR is moving, I think we're going to make that January 1, deadline on the commercial side, which is very hard.

REP. ARCONTI (109TH): You know, it's great to see, you know, your associations and you remember the last peer decision on the residential, you know, docket, I'm hoping, everyone can sing Kimberly -- again together on this next one. So, thanks Mr. Chair.

SENATOR NEEDLEMAN (33RD): Thank you, Mr. Chairman. And thank you, Mike. Up next, Will?

WILL GINN: Next is going to be Sena Wazer are followed by Daniel Collins.

SENATOR NEEDLEMAN (33RD): Wazer?

SENA WAZER: Yes, this correct, maybe even Distinguished Members of the energy, and technology Committee. Thank you for allowing me to deliver my public testimony, my name is Sena Wazer, and I'm a 17-year-old climate activist from Enfield Connecticut, The Co-Director of Sunrise Connecticut, and a Junior at UConn.

I'm hearing supportive SB 882, as well as to requested amendments be made to this legislation. I'm proud of the Connecticut; legislature has decided to take this important step to codified Governor's executive order three. It is critical, that Connecticut decrease a greenhouse gas emission, and begin the transition to a clean energy economy. However, there are some loopholes, and need to be addressed, so we acted the scale for climate crisis.

First, this Bill requires that 100% of electricity consumed, but not produced in the state of Connecticut be carbon neutral by 2040, which means that Connecticut can continue to build fossil fuel infrastructure, and export it to other states, well claiming to have met our climate targets. Not only is this deceitful to constituents, who assume that the Governor, and Connecticut legislature were truly trying to reduce our greenhouse gas emissions. But it also shows a lack of global thinking, it doesn't matter where electricity is being consumed, the greenhouse gases are still contributing to global warming.

Next, although I appreciate that the Governor has laid out a timeline for these changes, it is not fast enough. We have nine years left to ensure that we limit global warming to 1.5 degrees Celsius, and as such the timeline in the Bill needs to be revised. We must have a target of net zero carbon dioxide emissions by 2050, to ensure that we are in line with the Intergovernmental Panel on Climate

Change science. Furthermore, there's a provision in the spill that gives a DEEP Commissioner sole authority to say greenhouse gas reduction, and electricity supply in generation targets. However, DEEP has not always been the best ally in the fight against climate change, and so this provision should be amended, to clarify that there will be profit checks, and balances in place, including a diverse oversight Board.

And finally, this Bill should include a fossil fuel moratorium, although some see this as a drastic job killing measure, I'd like to debunk those myths. This is not a drastic measure, it is the least, we must do to ensure that communities are safe from the climate crisis, and in terms of jobs, fossil fuels are not the way to go. For example, the proposed killing the power plant would provide at most a couple dozen jobs, but imagine, how many more, we could create, if we instead expanded energy efficiency and built more clean energy.

I hope you understand the urgency of climate change and your job is elected officials. I said before you, as someone, who hopes to enter into public service, I believe in policy, as a vessel for positive change in elected officials, as the agent for that change. And so, I'm asking you to be bold possum support us be at to an amended to call for 100% of electricity consumed, and produced to be carbon neutral, speed up the timeline to reflect, the science ensure that their checks and balances on the DEEP Commissioner and put a moratorium on new fossil fuel infrastructure. Thank you.

SENATOR NEEDLEMAN (33RD): Thank you, Sana and I look forward to, when you are in the General Assembly telling us all how to do it correctly. We all need that, we're looking forward, and want to get some of the old guys, like me and a couple of other people who look, as old as dirt on the camera out of here. So, I won't mention who else I'm talking about, but there are a few. I'm not seeing

anybody with their hand up. So again, thank you for your patience and your commitment. You like the way, I mean that and not that serious. So, thank you very much.

SENA WAZER: Thank you.

SENATOR NEEDLEMAN (33RD): Will?

WILL GINN: Up next, we have Daniel Collins, followed by Celeste Fay.

DANIEL COLLINS: Thank you, Senator Needleman, Chair Arconti, Vice-Chairs, Ranking Members, and Members of the Committee. My name is Daniel Collins, I'm the Director of Government Affairs handling Power Generators Association. We think the Committee for this opportunity to testify on SB882, NIP Gate is the Trade Organization that represents Electric Power Generators that participate in New England's competitive wholesale electricity markets. Our Members come for roughly 90% of the install generating capacity in England, and really represent a variety of generating resource types; neither supports, nor opposes SB882.

And instead, wants to offer a few comments on the legislation as participants in New England's competitive, wholesale electricity markets never fully agrees with Connecticut on the urging need to address climate change. The question now though is, what is the best path to meet the state's climate goals now to advocate for a market solution that not only targets emissions in the electricity sector, but also support to decarbonize future that includes electrification of transportation in buildings, the competitive markets have reduced electricity supply costs for Connecticut's ratepayers, rather consumers wholesale like energy prices have declined by 51%, since 2004.

The average annual wholesale electricity price in 2019, was in fact the second lowest price of its

kind, since the markets were fully implemented in 2003. The electricity sector has also been a leader in driving down emissions in Connecticut competition, alone other factors has reduced power sector, carbon emissions. In Connecticut by 45% since 1998, despite these achievements, we agree that changes to the wholesale markets are now required to help Connecticut meet its climate, related laws changes that leverage the cost of liability benefits of the markets, but also account for the cost of carbon, that's the missing element, right now, from today's market, that's why NPAs is pleased to join other stakeholders in ongoing regional.

Efforts to identify wholesale market changes to better facilitate the kinds of resources Connecticut needs to meet its THC emissions reduction mandates. A sound long-term market design would add, I would also rather value resources that can ensure reliability, as the system adds more weather dependent resources like solar, and offshore wind up. We just ask that the new laws allow these regional efforts to perform to play out. So, the Connecticut can avoid long additional long-term contracting, which exposes ratepayers to additional cost and risk.

Just quickly an NPA has submitted detailed written testimony on SB 882 to, as well as, testimony and SB952, as well. So, I'd be happy to take any questions you might have, thank you very much.

SENATOR NEEDLEMAN (33RD): Thank you so much, Daniel. I appreciate it. Does anybody have any questions for Daniel? I'm not seeing anybody, I appreciate it. And we appreciate your participation, we really do.

DANIEL COLLINS: Great. Well, thank you all.

SENATOR NEEDLEMAN (33RD): Thank you. Will?



WILL GINN: Next up we're going to have Celeste Fay, and then we're going to go back to Cella Bernie.

CELESTE FAY: Good evening, I'm here on behalf of Gravity Renewables, and supportive Bills at 882, 952 and 6523, with modifications, that have been submitted with our written testimony. My name is Celeste Fay, and I'm the regulatory manager at gravity, as well as civil engineer. Gravity is the owner, and operator small hydro projects, including three in Connecticut the wire one project, and do it city a Borough of Griswold point of bog project in Brooklyn, and the five mile project at Kimberly. Small hundred provides a sustainable carbon free source of energy; and as an asset to their communities, aside from the clean electrons we provide non-powered public benefits, or reservoirs create waterfront property, and incremental property value.

We create recreational opportunities including boating swimming, and fishing our continued operations of these plants, means that our dams and civil structures are maintained to the highest public safety standards, as required by federal regulators. Hydro is a long-term asset, and many of these structures have been around generating power, since before they're even was in electric grid, with continued investment, they will continue to operate and definitely into the future. However, keeping them going, making sure that they continue to be compatible with changing environmental standards and doing upgrades for modernization, takes a lot of investment

Most of England states have hydro specific programs that recognize the value, and challenges of this existing hydro fleet, any netiquette.

SENATOR HASKELL (26TH): Does not.

CELESTE FAY: I'm done with programs, and can I get such as Class 1, however, they exclude projects that

predate 2003, effectively precluding, most of Connecticut's fleet. One important aspect here, is not just the low rates, you know, the open market two cent to three cent rates, have been mentioned a couple times today. But, also, that they're unreliable, and not bankable, so, in the near future gravity will be investing around \$10 million dollars at those three projects, that we have in Connecticut, just meet new regulatory requirements. But, it's very difficult to go to a bank, and get a \$10 million dollars loan, when you're not really sure, what the value of your energy might be in the future.

So, to maintain viability small hide your needs a pathway to recognize these benefits, and with appropriate value recognition. Such as that potentially provided by kinetics, kits virtual net metering program these assets, can continue to provide decades of say service. We provide a written testimony with specific language suggestions, the virtual net metering program, that would create an environment to recognize the value, and support continued operation in Connecticut.

Thank you for your consideration in this matter. And I'm happy to answer any questions that you might have?

SENATOR NEEDLEMAN (33RD): Thank you so much, Celeste Fay. I see if anybody who wants to share or have any questions for you? I appreciate you, and the other person, who came from Gravity Renewables.

CELESTE FAY: Thank you very much.

SENATOR NEEDLEMAN (33RD): Thank you. Will?

WILL GINN: So, now we're going back to Cella Bernie, and then it's going to Diana Burckhart.

CELLA BERNIE: Thank you, Hi everybody. Representative Arconti and the Members of the E&T

Committee, my name is Cela Bernie, I'm the managing partner of Citrine Power LLC, 100% certified a women owned, and Connecticut based commercial solar developer, and investor. We've been investing in Connecticut since 2018, and I've been investing in renewable energy since 2007. We're providing testimony today on behalf of my company regarding SB952.

We support this Bill, with modifications, like many other developers like Jaime from Lodestar, and Verogy et cetera I will not make it long, I will just reiterate, briefly. We ask the SB 952 to clean the existing virtual net metering queue as a bridge as a transition, while DEEP and PURA are working on the successor program. Bridging existing programs, the common practice, we witnessed in all other states, we work in New York New Jersey and Massachusetts while rule makers are working on successive programs.

Connecticut is the only state, we participate in the northeast that we witness long rulemaking pauses and it just doesn't make for a very good continuous business practice. And, as everybody has said, the number chosen to increase the virtual net metering cap in the Bill is just not enough to account for the high demand from Connecticut municipalities. I also wanted to offer, like everybody else through any CC, or us individually, I'm happy to sit down with anyone to show the Economics, because I think there's still a lot of confusion, about the rate how much of it goes to the municipalities, how much of it comes to us, how much of it do the EDC take, because they do recover costs through the virtual net metering rate as well.

So, we're happy to discuss all the economics, we also asked here in deep to expedite the rulemaking, and the RFP timeline for the successor program, and seek more active participation from renewable energy industry like us. We participate in multiple states, and we're engineers, investors, we operate

these plans practically, and we participate in many of these programs. So, we can actually offer a lot of insights, and above all, we're Connecticut based businesses, and we want to participate and expand our businesses, and so, it behooves all of us to have a successful program.

And lastly, for multiple reasons that everybody else, has actually already said, we oppose the EDC, to own 150 megawatts of solar assets. They control the distribution assets, and them owning the generation assets, as well, especially in the one megawatt to five megawatt range that we are talking about here, doesn't seem fair, especially when we get charged a lot of interconnection fees as part of our costs. Again, happy to talk about this more in our written testimony that we will submit. Thank you for listening to me.

SENATOR NEEDLEMAN (33RD): Thank you so much, anybody have any questions. Thank you for waiting around, and sorry we missed you, before Cela.

CELA BERNIE: No problem, thank you.

SENATOR NEEDLEMAN (33RD): Will?

WILL GINN: So next up is going to be Brendan Sharkey and then we're going to Eric Hammerling.

SENATOR NEEDLEMAN (33RD): Is Tom Melone -- I'm sorry, Mr. Speaker, is Tom Melone not here?

WILL GINN: Yes Senator, a bunch of people have had to drop. So, now we're going to be skipping around a little bit toward the end.

SENATOR NEEDLEMAN (33RD): Okay, great. Alright, Will. Great, okay. Sorry about that, Mr. Speaker.

DIANA BURCKHART: Oh, thank you, Senator, it's good to see you and Chairman Arconti and Representative for Senator Formica, I consider myself among the

grizzled old faces that you were referring to earlier though.

SENATOR NEEDLEMAN (33RD): Not yet.

DIANA BURCKHART: In an elected role. So, I'm here on behalf of Diana Burkhardt of SunPower Corporation. Diana had a personal obligation that you need to tend to this evening, so she asked me, if I could pension for her, we have submitted testimony on two Bills 951 and 952. My tray and referred earlier to 951, and our willingness to participate with the Committee and solicitation reforms, and changes that may be appropriate, and we've already begun that conversation.

I think with other interested parties, and we're happy to continue to play a role in that, with regard to section, or to Senate Bill 952, first, we really do want to applaud the Committee, and it's leadership for coming back to the energy storage issue, which I think we all are trying to get through last year, in house Bill 53-51. But, of course, got cut off, because of COVID-19, and, as you know, the PURA has begun their docket are three dockets on energy storage, with which we are participating at some length. So, it's terrific to have the statement from the legislature that it supports the future of energy storage here in Connecticut, so, thank you for doing that.

We also like others tonight have supported the increase in the CAP for virtual net metering, and frankly, the elimination of the CAP, even if only for a breach purpose to undo the queue, that is currently in place, and has been for several years. We do like others object to Section five of the Bill of 952, that would allow our utilities to own up to 150 megawatts of solar, for reasons that I think are obvious, and they've already been stated.

And then, finally, I want to echo the comments, that have been made about the need for a bridge, for

arson to get us to the new terrorists in January. I think, I know in conversations, I've had with industry folks, as well as, Members of the Committee that what has been sought on this issue, is a consensus between the green bank and industry, and other interest to stakeholders in this issue, as to what would the number be to get us to the new terrorists in January. And we -- I think the consensus from the greenback, as well as the industry and all others, is that a 35 megawatt extension of the existing authorization, would pretty much get us to January, otherwise, as you know, the RC program will run out of authorization approximately in May.

And that will leave the industry without new, the ability to fund new projects, between for the last seven months of the year, which is a huge gap for an industry that currently employs about 3,500 people here in Connecticut. That kind of separation, and gap is not good for the markets, it's not good for job creation. And, I'm hoping that it can be added to this Bill, or to some other future legislation, the Community is considered.

So, that summarizes our testimony on this, and if you have any questions, I'm happy to feel them.

SENATOR NEEDLEMAN (33RD): Thank you, Sir anybody have any questions at this point, being late at night.

DIANA BURCKHART: If I may, Mr. Chairman, I did want to just anticipate one question. Chairman, our content, which is that, yes, sun power has been actively engaged in the CNI tariff design, as well, having provide substantial written testimony. We've also conferred with Eversource in detail to develop a consensus with them, which is exactly what you were hoping would happen in terms of a kind of a kumbaya Kimberly-Clark, that occurred, similar to what occurred with a residential.

SENATOR NEEDLEMAN (33RD): Great. Thank you so much. Who's up next, Will?

WILL GINN: Eric Hammerling, followed by Heather.

ERIC HAMMERLING: Good evening, my name is Eric Hammerling on the Executive Director of the Connecticut Forest & Park Association. And, on behalf of CFPA, I'm here to express our opposition to sections 2 and 3 of SB 950. In 2012, I chaired the state vegetation management Task Force, established in the week of tropical storm Irene, and the October nor'easter to make recommendations on balancing Connecticut's, dual needs for reliable electricity, and to retain the many benefits that roadside trees provide to communities.

After we published our task force report, I worked with Representatives from you, I Eversource, and other stakeholders to develop the concepts of both the utility protections own. And an orderly permit, and public notice process related to tree pruning, and removals for municipalities, a buddy landowner, and the EDCs to follow this order, the public notice process in section 16-234, of the statutes has generally remained intact, and work well, since that time. The balance we struck almost ten years ago, was necessary, because electric utilities, often view trees as a potential liability. And many municipalities, and a budding landowner, view the same trees, as valuable community assets. Both of these strongly held views, can be true based upon local circumstances, and that is exactly, why it is so important to retain the balance process, with local input that exists and current law.

Under the current process municipalities, give a permit to EDCs, for the tree work that is proposed in their town and ETC, is have a process of informing and working with a budding landowner on the tree work, that is proposed in their neighborhood. SB 950 would allow EDCs, is to circumvent local input from both municipal tree

wardens and budding private landowners. And in addition, would extend the reach of ETC, is to prevent, or remove trees outside the UPC on private land. SB 950 as written is an overreach, and it is also unnecessary, though the existing municipal permit, through the existing municipal permit process.

EDCs is can propose to conduct a tree pruning, or removals along three phase means, and through the existing public notice process, EDCs is can work with a budding landowner to address hazardous trees, located outside the UPC, then they have potential for impacting their infrastructure. Under the statute, EDC is also having considerable authority to remove hazardous trees within the UPZ. The existing public notice process, is essential to ensure municipal and landowner input continue, so we asked you to oppose this Bill, that as written would undermine it. If the Committee plans on doing additional work with stakeholders to address some of the current issues in the public process, we will be very glad to work with you.

Thank you for the opportunity to testify today.

SENATOR NEEDLEMAN (33RD): Thank you so much. Anybody have any questions? I'm not seeing anybody, really appreciate your hanging on this long.

ERIC HAMMERLING: Thank you. Good night.

SENATOR NEEDLEMAN (33RD): Good night. Will, next up?

WILL GINN: Next up, we've got Heather followed by John Oates.

HEATHER DIONNE: Good evening, everyone. Can you hear me okay?.

SENATOR NEEDLEMAN (33RD): I can, Heather.



HEATHER DIONNE: Alright, good evening Chairman Needleman and Chairman Arconti, and Members of the Energy and Technology Committee. My name is Heather Dionne, and I am Chair of the Connecticut Urban Forest Council. I am representing the voice of many professionals and organizations throughout the state, who are in opposition to raise build number 950.

Just yesterday morning, the President of the Tree Wardens Association of Connecticut, other participating tree wardens public, works directors leadership of the Connecticut tree protective association, and leadership from the kind of Urban forest Council, met with Representatives from every source, to hear more about; why they were proposing this Bill. We understand the concerns for reliable electricity, and share those concerns, but; still, we're not comfortable supporting the proposal, as we're in, it would take away the authority from the tree warden, and a budding property owner for 5%, or less of customers that are resistant to Eversource conducting maintenance on their trees.

Tree wardens, are given Karen control of municipal trees, as presented in section 23-59, which states the town, or borough tree warden shall have the care, and control of all trees and shrubs in whole, or in part within the city limits, within the limits of any public road, or grounds and within the limits of his town, or borough. This has been practiced in the state of Connecticut for 120 years, and has proven to be a very effective method of managing public trees. The way trees are behaving during these intense storms are vastly unpredictable, because of the droughts of 2016 to 2018, and in 2020, especially, because larger trees farther back, on properties that you would never expect to fail, are failing and are taking out electrical lines, and breaking polls.

So, even if that one tree that we were talking about earlier in testimony, that someone doesn't want to

take down is removed, there is no guarantee that service will not be interrupted. Also, with recent infestations of emerald ash borer, gypsy moth, two-lined chestnut borer and now a new introduction of spotted lanternfly. Every healthy tree counts. A great solution in lieu of this Bill, is that the tree wardens and utilities, work together, as we all generally do. The Urban Forest Council and the Tree Wardens' Association of Connecticut offered to assist with education and outreach and yesterday's meeting with Eversource gaining the public's trust.

Regarding the care and maintenance of publicly and privately own trees within the utility corridor to secure undistracted electrical service, is the best approach for everyone involved, and would produce the best outcomes, creating a program that plants trees behind those, that have been removed, was also discussed. And it's a very critical component to gaining public trust, as well as slowing the spread of climate change. Trees are the most cost-effective way to mitigate climate change, and when planted in the right location, offer countless benefits for sustainable urban forest canopy, and a healthy Connecticut, there's a little bit more, about selective pruning and maintenance that was discussed as well for mature trees. Because they are powerhouses in the environmental benefits and they also withstand the significant storms, that have been blowing through; if done correctly through crown cleaning, reduction cuts and crown sending.

So, with that, I will wrap that up, and if anyone has questions, I'm happy to answer them

SENATOR NEEDLEMAN (33RD): Thank you Heather, I don't see anyone else with their hand raised, but I guess part of the goal here, is not to have an individual tree issue in a town end up a cure. Are you okay with the tree wardens being the final adjudicators these issues?

HEATHER DIONNE: Yes, okay.

SENATOR NEEDLEMAN (33RD): That's helpful, it's just more time and more money to get these issues to PURA, I have more faith in my tree warden, and I have in most of the people that work for the town, be very diligent. He does make a lot of money, but he loves what he does, and he mediates between things quite carefully, so that's actually quite good to know, and I appreciate it.

With that I'm going to thank you, and I'm going to turn the meeting over presented on thing.

REP. ARCONTI (109TH): Thanks, Mr. Oates.

WILL GINN: Alright, I'm sorry the next person is John Oates, followed by Roger Nelson.

JOHN OATES: I'm hopeful that you can hear me, Members of the Committee chairs vice chairs. Leaders of the Committee, I appreciate your you're sticking it out this evening, and what is what turned out to be both very educational along evening. My name is John Oates. I am the President of The Connecticut Career Fire Chiefs Association representing the leadership of the larger fire departments across our fair state.

And I appear to you this evening to provide our support for raised Bill 937 that will, we hope, address the deficiencies that we have all seen relative to utility response in recent times, from storm events. We appreciate the Committee putting forth this Bill would like to offer support of the Bill in its entirety and emphasize. A few specific things one, the stronger commitment to planning, it was painfully obvious during the August storm and subsequent events that the planning for response did not contemplate the depth and the scope of the damage that was that was potentially going to occur, and that many of the utilities were under prepared for what was going to happen provides strong support for some matrix that would develop a pattern or a

system to determine the amount and the abilities to make safe crews that are positioned throughout the state to allow communities to restore power and restore transportation circulation in their communities.

We recognize it as impossible to put a make safe crew on every street corner and multiple crews and every community. However, based on population infrastructure impact damage in need, there has to be something better than what appears to be very sporadic very haphazard means of assigning make safe crews to affected areas. We also strongly urge increased attention to the local liaison Program. The local liaison program is become an abject failure at one point you receive to your emergency operations Center or in communication with local officials, a knowledgeable talented individual that had information data situational awareness and understanding of the community's needs.

Now, the experience of many communities, is that is not the fact, as I shared in the written testimony. This summer, when asked, when multiple and it was not just our Community, was multiple communities, when their staff REP was asked the location of the crews working in their town, the answer was; we don't know, you're going to have to drive around, and find them.

WILL GINN: Few seconds.

CHIEF JOHN OATES: That is incredibly disappointing and there has to be a better way to organize, and to support the make safe crews, as they restore power in our communities, with that I don't want to belabor the point a written testimony in support of the race Bill is submitted. We're willing to work with through whichever avenue whether this Committee other segments of legislature or pure to lead these improvements, and to implement them in our communities, I appreciate the Committee's time, and thank you.

REP. ARCONTI (109TH): Thanks Chief, and thanks for sticking with us, you know, I don't see any questions, but thanks for bringing this this before us. Especially, with make safe crews, you know, your men and women, along with police are out on the front lines, every day, especially during these storms people rely on you, and your employees the most, and we want to make sure, you know, we keep you guys safe.

And I think this Bill tries to address some of the issues, that were discovered during the last storm. So, thanks for that I don't see any questions.

JOHN OATES: Thank you, Sir.

REP. ARCONTI (109TH): Thanks, Chief.

WILL GINN: Up next, we have Deputy Chief Nelson followed by Chris.

ROGER NELSON: Good evening Representative, our Connie server Needleman, distinguished Members of the Energy and Technology Committee, my name is Roger Nelson, I'm a Deputy Chief and Fire Marshal for the Bloomfield Center Fire Districts. I serve on the board of directors of the Connecticut Fire Marshals Association.

Thank you for the opportunity to testify before the Committee, and supportive Senate Bill 937. I've been lucky enough to follow chief Oates, his testimony and past couple times, so, I will keep this very short just going out a couple of points. Just reiterating to what he said in regards to the make safe cruise establishing, these make safe cruise, which should consist of one utility line bucket truck, and one tree service bucket truck. And if the crews work in conjunction with local DPW crews, will be able to efficiently open block roads, or assistant like safety measures. Secondly, the dedicated liaison program for each municipality,

will allow for a single point of contact allowing communication to be that much more effective, back from storm sandy, I was working with the EEOC, and actually had a very knowledgeable liaison who we drove around for three days. Although, the storm being such a disaster, were able to not duplicate efforts her out his point, was trying to get information from every source herself.

Connecticut Fire Marshals Association our partners are willing to continue to work with the Committee and its leadership. To strengthen elemental language in this Bill to help our local municipalities, we would like to thank the chairs, for their support on this critical issue the local municipalities across the state. Thank you.

REP. ARCONTI (109TH): Thanks Roger, thanks for your service. I don't see any questions from Community members, so thanks for your testimony.

WILL GINN: Next up, we're going to have Chris, and don we followed by Jeff Bishop.

CHRIS DONNELLY: Good evening Members of the Committee, and thank you for this opportunity I have learned a lot today. It has been an interesting day. At the same time being someone speaking so late in the day, I want to be redundant, and so, I do want to get right to the point. I am recently retired as Urban Forestry Coordinator, with this connected DP. Like Eric, Emily, and Kevin Kelly, I was part of the state vegetation management Task Force. Back in 2012, and along with Eric Kevin, like you and others, help them work on the language, that became PA13 to PA98, and after that part of 16-230 for the reason, I stuck around salon today is, because I wanted to stand up for the work that group did, as well as for the excellent work, that the tree ordinance to. However, at this point in the day, I really don't have much to add to the eloquent comments that you've already heard from Heather

Dionne for America really from Microsoft and Kevin Kelly earlier in the day.

The only thing I'd like to add is that we have to avoid seeking simple solutions to complex problems and the issues with trees are very complex and Connecticut. Just as we are there, dealing with the changes, coming from climate change invasive insects, and so on. The one thing I learned today is that the length of the circuit that is discussed in SB 950 is a full quarter of every source and circuit, so it's not an insignificant line.

As I suggested on these are complex problems, many of us continue to work very hard, I'm heartened by Senator Needleman words are suggesting that tree wardens should play a very key role in resolving issues, with local trees. I'm a strong supporter of the expertise of individuals at the local level, and I will leave it there.

REP. ARCONTI (109TH): Thanks Chris, I don't see any questions, so thanks for your testimony, thanks for sticking with us wake.

WILL GINN: Up next is Jeff Bishop, followed by Robert Basett.

REP. ARCONTI (109TH): You're muted you.

JEFF BISHOP: Hear me now, can you 'all hear me?

REP. ARCONTI (109TH): Yes, we can hear you.

JEFF BISHOP: Hey, thank you, so personal, thank you for this very long day, and echoing other speakers, I'll cut right to the point. My name is Jeff Bishop, I am Founder and CEO of Key Capture Energy.

For years ago, decided to start a battery storage development company, where we develop construct own and operate standalone battery Storage projects. We have two main markets initially New York and

Connecticut, because they had the same basic fundamentals of the entire economy, was rapidly decarbonizing, and the states really needed to find a way to, you know, make sure that rate payers are protected, while moving over towards more wind and solar. And so that's a perfect spot for battery Storage projects to be, since then we've built out our team to 48 people in the last four years.

We are the largest owner and operator of battery Storage projects in New York, we are the second largest owner operator down in Texas, and we currently have under operations, or in construction about 254 megawatts total, and I'm here to testify in support of Connecticut Senate Bill 952. With respect to the energy, storage provisions three real key things on the energy storage side, first of all in energy storage target gives. You know, a very clear runway for developers like me to invest capital, since we started developing projects, and Connecticut for years ago, we spent about a million and a half so far on three projects, and Putnam Bloomfield and down in Groton. They are near shovel ready at this point, and we're looking for a market, so that we can actually build these things out, and you know, put a lot of money to work.

The second part is after the energy storage target the real key part, about having an RFP to potentially do a procurement. With an RFP always I asked, don't mandate that you actually have to prepare just mandate, and you have the RFP, utilities, and public utility commissions all across the US have determined that energy storage alone is very cost effective for the right ERRS. And as such, you know, if we can go through an RFP and just show our price, and what we can do, you know, I'm confident that we can win it. And the third part is that in any new technology, new industry, there's going to be some really wonky technical that needs fixed.



And so, there's weird you know relationships on demand charges, where batteries can basically will be charged a lot, whenever they're actually providing grid services, and so just we will be needing some fixes on demand charges, just put us at parity with everybody else, thank you.

REP. ARCONTI (109TH): Thanks Jeff, thanks for your testimony on the whole genesis of the storage part of the Bills to get the attention of storage companies like yourself. So, I'm happy to have you testify tonight, I don't see any questions, but thanks for your time. Thank you.

WILL GINN: Next up is Robert Basett, followed by Samantha Dynowski.

ROBERT BASETT: A good evening Chairman our county, and Chairman Needleman, and Members of the Energy and Technology Committee. My name is Robert Basett, I'm the Director of Compliance and Regulatory Affairs on Energy. I appreciate your time and the opportunity to speak with you this evening regarding HB 6526, and a half, concerning electric suppliers.

Just to give you a brief background story on, as a competitive electricity supplier, we are based here in Connecticut, and we've been serving Connecticut homes and businesses for more than 10 years now and we currently serve approximately 17,000 customers here in the state. We offer competitive fixed price plans, to consumers in Connecticut including a voluntary green plan, which is sourced exclusively from New England based renewable generation, started energy opposes the provision in section for HB6526 that would propose the elimination of automatic contract renewals.

We believe this legislation would be harmful to the consumers, who have taken the step to make a choice in their energy provider. As a company, our primary goal is to build long lasting relationships with our customers, honoring their choice to shop, and choose

story, and energy as their preferred provider, and the way that we do this is by working to deliver value to our customers.

There was some discussion earlier, about the incentives that suppliers have one serving customers in Connecticut, and I just like to add that is store own incentive and that is to build a long-lasting partnership, with our customers and we can only do, so by delivering value to them, during the entire time that they are with us, as a customer not just during the initial contract term. As a result of the robust consumer protections that have been implemented by this Committee and PURA in recent years. We believe customers are made aware of the price terms that occur after contract renewal customers can then review those terms, and decide whether, or not to opt out, if they did not find them satisfactory.

At story, and we are constantly intended to the feedback, we received from our customers, and we have not received any complaints suggesting that there's an issue regarding automatic renewals in recent years. Earlier this evening Representative accurate asked, if the rules and statutes implemented over the years by this Committee, and by PURA made a difference. Sorry unbelievers they have in the past decade personally working in this industry, I have seen the market improvements, and Connecticut. But I won't ask you to take my word for it, the complaint statistics posted on purists website will clearly show that there's going to 94% decrease in complaints against electric suppliers, since 2014.

In contrast, Star and believes the language in the Bill regarding the elimination of legacy variable rate contracts will largely address the concerns regarding pricing that have been raised here today.

WILL GINN: Very second.

ROBERT BASETT: And with that I thank you for your time this evening appreciate the opportunity to comment before the Committee happy to answer any questions you may have thanks.

REP. ARCONTI (109TH): Thanks, Robert.

REP. ACKERT (8TH): Thank you, Mr. Robert for being here and testifying, and staying late with us. Just a question, what is it just have you can. you may not know this off the top of your head, but what is the standard length that a customer is with you? As, when you give them, you know, provide them your services, what's the, I know, that there's a usually a short duration for kind of the introductory offer. But what is an overall standard at timeframe that a customer is with you for a contract.

ROBERT BASETT: So, for a fixed price term contract, we offer a various number of contract length, it depends on the time of the year, our ultimate goal is to offer the best price possible to our customers. So, generally no more than 12 months, though in Connecticut, it could be, as little as six months, it just depends in terms of the full lifecycle of our customer relationship, though we've had we have a number of customers that we've served for several years. And those customers would come to us, and roll on a fixed price plan, and then continue with us, whether some customers choose to call in, and see if they have, you know, there they may want to hear more about green rates, they may want to see, if we have any other offers.

Certainly, have customers that you know when their contract is renewing, they're going to call in and see if they can get the best possible deal, similar to what you might do when your when your cable subscriptions coming up for renewal or other services, similar to that. But, generally, yes, we have a lot of customers, that we searched for several years, and some of those are through automatic renewal.

REP. ACKERT (8TH): And some -- and some jump in. I used to -- I used to do this more often. I would jump in, and look at a low rate. That was all-electric at one time, and I would be looking. There's another customer for another low rate, and so I was one of those ones that bounced around in the past with shopping -- I guess we shopping, right?

ROBERT BASETT: Right.

REP. ACKERT (8TH): So, if you had -- and that you probably like I said, you said, and some are short term, you know, for the first duration to maybe a year, but then, some are longer terms, right? So, there are those that that play the -- play the market sort of site.

ROBERT BASETT: Yes. And that's -- you know that's a benefit of the Energy City Rate Board that Connecticut has put together. There's a lot of great information on there, and it's a great tool for customers to use to evaluate prices and switching. There certainly customers that like to, just switch back, and forth, to the best deal.

And, you know, we operate in a competitive market. We fully support that. But, as I said earlier, you know, one of the things that we really push is to provide value to our customers over a longer period of time, and so that's the incentive for us to ensure that upon renewal of that contract, we're giving them something, that continues to deliver value to them and not just focusing on that initial contract term, and then forgetting the customer for the rest of the time. That's not our business model.

REP. ARCONTI (109TH): You're muted then.

REP. ACKERT (8TH): Hey, I just muted myself again. Okay late, I guess. So, thank you, Mr. Basett. And thank you, Mr. Chairman.

ROBERT BASETT: Thank you.

REP. ARCONTI (109TH): Just a quick question, Robert. You know, if you guys are, you know, providing the value, you know, you're -- you know, the Committee that you're providing to your customers and developing the relationships, you're developing why is having them -- why is having the need for them to renew on their own with you, if you're building those relationships, you know, that important, if, you know, the better company, you are you're going to shine in this scenario like that?

ROBERT BASETT: Sure. So, in addition to striving to provide a high value to all of our customers, another thing that we focus on and that we really try to differentiate ourselves in the marketplaces is being a simple, straightforward and convenient as possible to our customers. And, you know, to enter into a contract with an electric supplier, for a variety of reasons there's a lot of great consumer protections in place, and those are important, and we agree with those. But to encourage or to require a customer to go through that process every single time, when they're completely satisfied, with the rate that we'd be offering them, without having to go through that process, is just -- it's just an added -- it just -- it takes away from the customer experience. It's an -- and it's an extra step the customer needs to take.

We certainly have customers that do call in. And they may say, "What else do you guys have? I just got something in the mail from another company, can you beat it?" And then during that -- and in response to that, yes, we would have them go through that process to execute the new contract. But we believe the customers, as long as they're getting the information, they need to understand what rates

they're moving to, and they're okay with that they -  
- that should just be allowed to continue. It's in  
the interest of consumers, and many of our customers  
-- a large portion of them are accustomed to that  
process over the years.

REP. ARCONTI (109TH): Yeah. I'm not sure, if a  
customer saving money, they're going to mind taking  
an extra step though, and, you know, we're really  
trying to avoid the scenarios that Chair Gillette,  
you know, out outlined earlier of people paying even  
Representative Ackert got caught up on time paying  
17 cents a kilowatt hour, you know, that's -- and  
especially in this environment that's -- you know,  
that's not ideal, considering how many people are  
struggling out there, but more of a comment than a  
question. Anyone else question for Robert? I think  
--

ROBERT BASETT: If I think just briefly, I would  
just respectfully suggest that I completely  
appreciate those comments. I just believe that the  
provisions in the Bill that would eliminate legacy  
variable rate contracts will likely address those  
concerns about --

REP. ARCONTI (109TH): Thanks, Robert.

WILL GINN: Next up is Samantha Dynowski followed by  
Carol Christiansen.

SAMANTHA DYNOWSKI: Good evening, Representative  
Arconti, Senator Needleman, and Members of the  
Committee, my name is Samantha Dynowski. I'm say  
Director of Sierra Club. On behalf of the Sierra  
Club and are more than 40,000 members and supports  
in Connecticut, want to thank you for the  
opportunity to testify today, and thank you to the  
Committee Clerk Will, for what you were doing to  
make this hearing possible, appreciation to you all.

And the Sierra Club is committed to solving the  
climate crisis with just an equitable solution that

will result in a healthy world for everyone. Science tells us that we only have a few years to drastically reduce greenhouse gases, to avoid the worst impacts of climate change. A healthy livable planet for all is the context in which I offer this testimony.

Sierra Club supports Senate Bill 882, with an amendment to include all electricity generation in Connecticut in the 100% zero carbon target. As drafted, the Bill only covers electricity supply to customers in the state. By only covering the electricity supply to electric customers, Connecticut could technically achieve 100% goal in 2040 while still having 54 fossil fuel power plants running in the state as we do right now.

As written, SB 882 would allow Connecticut to increase electric sector greenhouse gas emissions from fossil fuel power plants, as long as we export the electricity to other states. We don't think this is the vision for 100% that we all expected. The Sierra Club urges modification of the Bill to include electricity generated in the state, in addition to supply.

Consistent with that, we also support a moratorium on any new fossil fuel plant -- power plants. Given Connecticut's stated goals to decarbonize the electric grid, it simply makes, no sense to continue to develop counterproductive electricity generation inconsistent with our carbon reduction goals. We have made the same recommendation and comments submitted on the draft IRP and we support the other provisions in the Bill.

We also support Senate Bill 952 on energy storage. This Bill is needed to help overcome existing impediments to commercial development of large-scale storage systems, and to deploy storage. On House Bill 6524, we oppose this Bill in its current form. At this time in the climate crisis Connecticut should not be subsidizing, or further enabling

fossil fuels. The Sierra Club opposes the Bill, unless it is amended to ensure subsidies are only given a fuel cells using renewable sources and not fossil gas as a feedstock. Thank you for consideration of her testimony.

REP. ARCONTI (109TH): Thanks, Samantha. And you're right, our Clerk Will is definitely the MVP of the Committee here. Even though we still have a couple more meetings, I'm already giving him the award right now.

I have just a quick question on -- yeah, I brought this up earlier with the Acadia Center is touching on transmission build out. You know, they're building out the superhighway and really to modernize our grid so we can implement the renewables that we want to implement on the system.

So, I know the Sierra club, you know, generally had some -- has some concerns with, I know, the northern pass, you know, why it's been our project, I believe, in Maine. So, just kind of want to get that perspective from your organization on, you know, what we're going to need to do around transmission and going into the next two decades for renewables?

SAMANTHA DYNOWSKI: Yes, we are definitely engaging with ICE and wrangling on that. I think it depends on the transmission; the Northern passes intended to bring Canadian hydro through New England. And Canadian hydro, is something we have pretty grave concerns about, given the impact on indigenous communities. But, you know, I would agree, there is a need to address transmission, and we're actively engaged in that process.

REP. ARCONTI (109TH): Thanks, thanks --

SAMANTHA DYNOWSKI: And I just -- one more thing on that the more we can focus and prioritize distributed energy generation, of course, that



relief some of those transition -- transmission concerns, certainly not all of them, because, we do need utility scale wind and solar you.

REP. ARCONTI (109TH): Yep, agreed. And that's why it's also vitally important that the ISO, you know, recognize our D.J. resources so they can actually see what's part of the grid. That's all for me. Rep. Ackert, I see has his hand up.

REP. ACKERT (8TH): Thank you, Samantha, for being here. I know you would have been stuck in toes midnight, you know, in your efforts. So, there's been a lot of discussion from the small so -- oh, excuse me -- the small hydro plant in this -- in the state, and their value that could bring -- would eliminate a lot of transmission lines. I mean it would be more centralized, would be in Connecticut. So, what are your thoughts on the small hydro plants?

SAMANTHA DYNOWSKI: Yeah. I have to admit I don't know a lot about this, but I know we do acquire some of our energy currently from small hydro in Connecticut. I -- I'm not sure that it has -- you know, there's enough of it to really fill a great need. But we are -- we are using some of it now and development of new would need to, you know, be very careful in terms of meeting environmental standards, but it has potential.

REP. ACKERT (8TH): Yes, I think -- I think you're right. I think, you know, Kenya what -- where's appropriate place to put it, whatever may be that makes sense, but, you know, there's a lot of discussion tonight about how little they get. Trice-wise is amazing, that it would be even if they got a little bit more, it would still save our ratepayers and provide a zero-carbon energy source, so, again, thank you for being here, and, yeah, would love to hear more thoughts on that for you in the future.

REP. ARCONTI (109TH): Great. Seeing no other hand. Saying thanks, Samantha.

SAMANTHA DYNOWSKI: Alright. Thank you. Take care of you all.

WILL GINN: Next up, we have Carol Christiansen, and that's going to be followed by Melinda Tuhus.

CAROL CHRISTIANSEN: Good evening Senator Needleman, and Distinguished Members of the Energy and Technology Committee. Thank you for allowing me to testify this evening. My name is Carol Christiansen, and I'm the 2021 President of the Connecticut Association of Realtors, which I'll refer to as CTR. CTR submits this testimony in opposition of SB882, AN ACT CONCERNING CLIMATE CHANGE MITIGATION, AND HOME ENERGY AFFORDABILITY. CTR represents over 17,800 members involved in all aspects of real state, in Connecticut. CTR's members work directly with thousands of buyers, sellers, landlords and tenants annually.

CTR recently had discussions with the proponents of this Bill. As we understand the language Sections 4 and 4 of SB 882 to require property owners listing homes for sale or lease, to provide prospective buyers and tenants with either a home energy label, which is a number-generated during a home energy audit that summarizes the property's energy efficiency, or the last 12 months of energy Bills. DEP would be charged with creating regulations to administer this new standard. The legislation, also create certain fines to be placed upon a landlord or property seller for non-compliance.

CTR believes that this new mandate would have the unintentional consequences of providing the opposite of transparency to the consumer by providing a false expectation to consumers about energy Bills that are only reflective of energy use of a prior owner and not the potential energy use of a future owner. Tenants may reject units, based on a high utility

Bill, that would not be the same as their own potentially lower energy use and costs, or they may vastly underestimate in energy costs, relying on those prior Bills, that may be significantly lower than their own costs, and maybe based on their own use and circumstances. Examples are provided in our submitted written testimony.

In addition, the types of heating used in a property may be affordable one year and expensive the next year, again, giving a consumer false information for what to expect instead of transparency. Energy audits are already voluntarily available for any prospective tenant or property purchaser, who may wish to rent or buy a home. These audits are also available to any property owner who is not planning to move but wishes to have options identified. These audits also provide specific recommendations on what may be done, and at what point in time to improve efficiency, which then the consumer has the option to include, or not include.

Energy scoring is recognized to further stigmatize older housing that can often cannot be, as efficient as a newer property. Properties with energy efficiency is often widely advertised, that fact. Again, anyone wishing to learn more about a property can get an energy audit. If there's an expectation that a new costs and additional time to be added to every rental or purchase transaction in order to proceed that will impact the very real problem that Connecticut has right now with costs that will end up being passed on to tenants or buyers.

CTR believes SB 882 is the wrong direction, if the goal is climate change mitigation and encouraging improved efficiencies. There are much better ways to encourage increased energy efficiency in our homes and increased spending for improvements. A tax credit or other incentives for energy efficient changes would achieve better results without creating a new mandate on landlord and property

sellers that will most likely not result in either improved information, or improved efficiency.

To conclude, SB 882 would create a whole new obstacle in the real estate marketplace. CTR request your rejection, as drafted, of SB 882, but we hope to continue discussions with the proponents of the Bill. Thank you very much for your time, and attention to this important matter.

REP. ARCONTI (109TH): Representative Mushinsky.

REP. MUSHINSKY (85TH): Thank you, Mr. Chairman. I wanted to ask, if someone wanted to get the energy audit and they're considering buying the house, are they able to do that, or can only the seller - the owner of the house could be energy on it?

CAROL CHRISTIANSEN: I believe that, if you were it -- getting into a transaction with a -- with a seller that you could ask that of the seller, on your behalf. I'm not actually sure I can answer that question, whether a buyer could order one on a House that they didn't own without the seller's permission, but that could be part of the negotiations in the sale or a rent.

REP. MUSHINSKY (85TH): Okay, thank you.

REP. ARCONTI (109TH): Representative Foster.

REP. FOSTER (57TH): Hi. I'm sorry, I was surprised actually by the -- your opposition. So, again -- so I asked for in my recent, you know, several years ago purchase of our home for past energy visit. So, I'm confused by your -- you feel like people will get the information and misinterpret it to be like directly congress to their own cost. You don't think that the average consumer will understand that?

CAROL CHRISTIANSEN: We believe that if you're asking for energy costs for 12 months, that

depending on the size of your family and the family coming in, it could be a great discrepancy in the actual costs for you. If it's a family of four now and then a single person's moving in, those Bills aren't going to help him -- this -- the single person decide how much those costs really are going to be.

And then, with the changes in costs in electric gas and oil, you can go in saying there's always been people have said sometimes they think that electricity -- electric heat is not the thing, and then another year it's oils not the thing, gas isn't a thing. It changes -- it can change from year to year. So, we're just afraid, we really don't want it mandated. People ask all the time now in real estate, can you get the Bills for me, can you get the oil Bills, can you get the? And those are actually a really pretty easy thing to do in a transaction. Our opposition more, is it being mandated, it's going to add a lot of extra time on to a transaction.

REP. FOSTER (57TH): But how often are people already asking for and how -- it -- so if it's something that's commonly asked for and easily obtained, but I get -- I guess, I understand -- I understand the concern about increased burden, but I feel like if it's something that's easily obtained and commonly asked for, and beneficial because often people are asking for it, you don't feel like people who were --

CAROL CHRISTIANSEN: The Bills that -- the Bills are what are normally asked for. People hardly -- I don't think, I've ever had anybody actually asked for an energy audit.

CAROL CHRISTIANSEN: I think a lot of homeowners -- I can use myself for an example. I'm going to be selling my own home, and I recently called to get home energy audit. Just being a realtor, you want your house to be you know the tip top. And it was

going to take three and a half months to even get an appointment. So, you know, those are some of the concerns that we have with that.

REP. FOSTER (57TH): But it's either, or you don't -  
- you don't feel like people would be able to share  
one or the other?

CAROL CHRISTIANSEN: I think that people do ask for  
energy Bills now. And in most cases, it's not a  
problem to get them. I thought -- and the energy  
scoring thing, I think, is something that would be a  
concern. But, I think, in general, we're not  
looking for it to be mandated. It's part of what we  
do now as far as getting Bills, because it's an  
either or. So, the or is getting the Bills, and we  
can -- we pretty much can do that now, without it  
being mandated.

REP. FOSTER (57TH): Okay. Well, I appreciate your  
answer. Thanks so much.

REP. ARCONTI (109TH): Sir Haskell.

SENATOR HASKELL (26TH): Thank you so much, Mr.  
Chair, and thank you, Carol, for your time, and for  
your testimony. Appreciate your patience. It's  
been a long day for the Committee, so I will just  
ask one very brief question. Your colleagues, or,  
you know, equivalents in other states that have  
tried this, Connecticut, wouldn't be the first  
obviously. I think there may be six states that  
already require some level of transparency, in terms  
of energy costs. Have they -- have any of the fears  
that you -- or the concerns that you laid out  
actually come to fruition in those other things?

CAROL CHRISTIANSEN: I'm afraid, I don't think I can  
answer that question, because I'm not really sure  
about that. But, you know, other states sometimes  
do real estate differently. I -- even in  
Connecticut, we have one in the state does it  
different than the other end of the state does. So

-- but, I don't really -- can't answer that question for you, unfortunately.

SENATOR HASKELL (26TH): No. No, problem at all, I'll look into it, and thank you for your testimony. I guess -- yes. You know what, Mr. Chair, I will be added -- I respectfully ask the Committee. I limit myself to one question, but thank you so much.

REP. ARCONTI (109TH): Thanks. Representative Demicco.

REP. DEMICCO (21ST): Thank you, Mr. Chair. Believe it or not, the good Senator just anticipated my question. I was curious to know, how this worked out in other states because it was represented earlier -- much earlier in today's hearing, that other states -- I think, New York was referenced have been doing this for a long time, and I'm -- along with Senator Haskell, I'd be curious to know how it works out there as well. But I, you know -- so I guess, we all have some homework to do, so thank you.

CAROL CHRISTIANSEN: Thank you.

REP. ARCONTI (109TH): Representative Meskers and Ackert.

REP. MESKERS (150TH): Thank you, Carol. Thank you, Mr. Chair -- David, yah, for your forbearance here, it's getting late gotten as we've been here all day.

Carol, I'm conflicted on the regulation, because they understand the regulation could create friction and problems in the sale of the house. Now I'm not sure what the availability of energy audits. And when we look at a time frame, right now, like COVID when everybody wanted to move to the state in about two weeks, I'm not sure how quickly those energy audits get done. But I would suggest, maybe, what would be helpful is in consultation with your membership look, if I sold my house tomorrow and

someone told me how to assemble my water Bill, my gas Bill and my electric Bill, I kicked the real estate agent, and I'd curse -- and I'd go online, and I print them out in about 10 minutes.

So, I think there -- we need to -- we need to think about what's achievable, and what's acceptable and what's doable. I think -- you know, and I understand the issue that an energy audit is probably better in some level than an energy expense because the audit tells you the quality of the house and the energy Bills only to -- could an tell you as Representative Ackert said, say how many people are in the house, or how many times they're using the washing machine or dryer. So, you've got eight people versus two people, you'll get different energy Bills. But, I think, it's a decent baseline for heating a house, and looking at certain things, so I think we'll have to think, as a Committee.

But I would suggest it would be good to have interactive commentator -- come -- a comment from your group, about where you think it goes too far becomes a hurdle for timing or the closing of the house, because I -- and I understand your concern, okay? But, thank you.

CAROL CHRISTIANSEN: Thank you.

REP. ARCONTI (109TH): Representative Ackert.

REP. ACKERT (8TH): Oh, thank you, Mr. Chair. And good thing for being here. I brought up the concerns earlier, but way earlier like probably 11, o'clock to Commissioner Dykes that everybody's habits are a little bit different. And I think right now with living in a home now and working in the home, your energy costs are higher. I brought it up. I have a relatively decent-sized house, and one person in it so, as opposed to family -- a family of five living in the home. So, no. I brought that up.



I do agree with Representative Foster's that opportunity to ask the question, now rather than mandated, I think that -- she brought up a good point. As a consumer, we should be able to ask that, and I -- granted, I know, it's not going to be on a list, but I think there's good -- and some couple of balance. And I always have a concern of the mandate. But we did mandate to housing market a few years back, that they must have working smoke and C.O. detectors in the house, right? And, Carol, that's a question to you, that we've mandated, that we would make -- mandate smoke detectors in houses and C.O. detectors. If they weren't up, they will just give money back to the buyer, \$250 dollars. We're doing the same thing with this. If you looked at this legislation, it says that, "You either provide this, or you give us \$1,000 dollars."

So, if you aren't able to maybe get the Bills and amount -- in certain amount of time, or care to offer that information, we out -- in this area have oil heat, right? A lot of us have oil heat, and I'm in the commentary area, a lot of -- and you may not be able to get a yearly value of oil, it's just hard to do that, you know?

So, they may just say, "Oh forget it. I'm given \$1,000 dollars back, and so it's a loss to the seller of the house. So, those are some of the concerns that I do want to comment on, but those are some of the concerns I have on those sections. And similar to the rental section, I can see in a rental area -- a rental, we have electric heat -- somebody goes in all sudden, they've gone and then rent the heat -- they find out the electric heat in those -- in the winter is the same value as the rent that month. So, I could see some issues there. I think we need to come up with a balance on this though, rather that strict out mandate. You're welcome to say, "You're crazy, Ackert," or, "You're right."

CAROL CHRISTIANSEN: Well, I thank you for your thoughts.

REP. ACKERT (8TH): Thank you, Mr. Chairman.

REP. ARCONTI (109TH): Thank you, Representative.  
Senator Needleman, batting cleanup.

SENATOR NEEDLEMAN (33RD): Thank you, Mr. Chairman. Carol, I want to thank you. You've stayed with it, and you've made your case. I want to remind everybody on this call -- in this meeting at this hearing, I don't even know what it is anymore, that there is a chasm of difference between renters and buyers and their needs are very, very different. Their incomes are very, very different. Their ability to ask more sophisticated questions is very, very different.

I'm not going to give you -- you know, my opinion is we don't want to create a bureaucratic nightmare. But we have a problem that needs to be solved, more on the side of the renters than on the side of the buyers. But we have a problem, we have a Bill from the Governor. It is one of his major priorities. I suggest that the industry sit down, have a serious conversation amongst their all members and come up with a solution.

If you don't like the solution that the Governor and DEEP have proposed, please come back to the table with a solution. We are ready, willing and able to have a conversation with you about it. Okay? And the energy --

CAROL CHRISTIANSEN: Thank you, Senator.

SENATOR NEEDLEMAN (33RD): Yeah, the energy audit is not it because it does take months. You know, what kind of disclosures could go along? Yeah, maybe are not exactly the total -- you know the sum total of all the Bills. But, what type of heat, what age boiler, what type of hot water? Things that actually happen in most residential sales disclosures, there's a lot of that information

there. You just have to read it, and you're going to get a home inspection. Most renters, do not have that luxury, and that's -- those are the people who get really hurt.

My -- exactly the problem that, we know, and that the Governor are trying to fix. Nobody wants to rent an apartment for \$1,000 dollars a month, and find out that for three months their heating Bill or electric Bill is \$1,000 dollars a month. That's being blindsided, and it's not okay. So, we need to figure out something.

REP. ARCONTI (109TH): Thank you.

CAROL CHRISTIANSEN: Thank you.

SENATOR NEEDLEMAN (33RD): Thank you, Mr. Chairman. And thank you, Carol.

CAROL CHRISTIANSEN: Thank you.

REP. ARCONTI (109TH): Thank you, and no other questions? Thank you, Carol.

WILL GINN: So next up is Melinda, and it's going to be followed by Rick.

MELINDA TUHUS: Hello. Thank you to the entire Committee, and especially thanks to Will, who has been so incredibly helpful to me all day today. I'm going to probably shorten my testimony, because some of it's already been said. But basically, I'm here to support SB 882, with the changes that others have are all -- also called for that -- to count all the emissions produced in Connecticut toward our goal of a carbon-free grid by 2040 and to establish a moratorium on new gas power plant construction. And I just wanted to talk a little bit about gas.

So called natural gas is another name for methane, a very potent greenhouse gas that a second -- that is the second most damaging greenhouse gas emitted by

human activity behind CO2. And methane leaks at every stage of the process from the wellhead, to final use. The Sierra Club actually did a study -- a survey of incredible number of leaks in Hartford, and I'm sure, there are in every city in Connecticut and in town.

According to experts, like Tony Ingraffea and Robert Howards of Cornell University, methane is 100 times worse for the climate, molecule for molecule, than carbon dioxide. In the first 10 years after release because it dissipates quicker than CO2 in the atmosphere. But leakage rates make it worse for the climate than emissions from coal or oil. And so, to call it a bridge fuel, and to say it's okay to build -- you know, frack gas, power plants, year after year in Connecticut is really -- it's not acceptable, especially since the Intergovernmental Panel on Climate Change had said, we have now less than 10 years until 2050 before we are headed to irreversible climate change. So, I think, that -- that's something, that's really key in this. I think, we do need to count all the emissions, and I think we need to stop building the power plants that are creating these emissions, or we're really in big trouble.

I also just wanted to say, they, the issue of doing the -- what was just the conversation that just happened to -- that with the previous speaker. There's a different -- a little bit, different perspective, that I had after our conversation with Leticia Colon de Mejias about owners who are low income and aren't able to you know make their house energy efficient are actually at a disadvantage. And so, I think if this is to be -- you know, if we're going to pass this out, there should be funding allocated to those households, that they can access to make the energy efficient -- efficiency improvements, which would make things better for everybody.

And the only last thing, I wanted to say, with one sentence is for SB 950, I oppose it. And I feel like it's been an end where -- it would -- it to pass, it would be an end run around the very recent pure -- a decision which kind of went in the other direction. So, thank you for the opportunity to speak to you tonight.

REP. ARCONTI (109TH): Thank you, Melinda, and thanks for your testimony. Thanks for sticking with us late into the night [laughter].

MELINDA TUHUS: I thought, it was gonna be midnight, so it actually feels not so bad.

REP. ARCONTI (109TH): Alright. I thought that at one point too. It's okay. Seeing no questions, thank you so much.

MELINDA TUHUS: Thank you.

WILL GINN: Alright. Next up, we have Rick and then it's going to be Mary after that. Rick, are you there? Okay. We may be having some technical difficulties, so we'll come back to him next see -- if he can come. Next up is going to be Mary -- yes, it's gonna be Mary.

MARY LOUISE NUARA: Great. Thanks, Will. Can you hear me okay?

REP. ARCONTI (109TH): Yep.

MARY LOUISE NUARA: Great. Good evening, Chairman Needleman and Arconti, Ranking Members Formica and Ferraro, and Distinguished Members of the Energy and Technology Committee. My name is Weezie Nuara. I am Dominion Energy State Policy Director for New England. I actually joined Dominion last March after the Capitol Complex closed down so it's great to meet many of you for the first time, albeit it virtually.

I'm here today to offer testimony in support of Senate Bill 882, AN ACT CONCERNING CLIMATE CHANGE MITIGATION AND HOME ENERGY AFFORDABILITY, and Senate Bill 952, AN ACT CONCERNING CERTAIN SOLAR ENERGY PROJECTS. As many of you know, Dominion Energy is owner and operator of Millstone Nuclear Power Station in Waterford Connecticut, one of the largest generating stations in New England, and the largest source of carbon-free electricity in the region are that reason. We are the clean energy hub of Connecticut and New England, and we are excited about the possibilities and opportunities to do more.

Dominion Energy support Senate Bill 882, specifically, it's provision codifying Governor Lamont's goal to achieve a 100% zero carbon electric sector by 2040. The Governor called on the Department of Energy and Environmental Protection to analyze pathways to achieve that goal, through its integrated resources plan. The draft IRP was issued in December, as Commissioner Dykes noted earlier today, and we were pleased to see with the -- we are pleased to see the results of that analysis.

First of all, the draft report highlights the significant progress Connecticut has already made towards decarbonizing its electricity supplies, particularly through preservation of Millstone. The draft report also makes clear that continued operation of Millstone through 2040 allows Connecticut to achieve at zero carbon electric sector goals in the most cost-effective way possible.

The scenario that models Millstone's continued operation through 2040 reveals significant benefits for Connecticut, including \$5 Billion dollars in total ratepayer savings given Millstone's low-cost energy and more than 8,000 megawatts of fossil fuel retirements across the region, compared to other scenarios that assume Millstone retires in 2029. In our view, the Millstone extension scenario is an

important pathway for policymakers to consider. It supports continued operation of Millstone, an economic driver for the state, and it puts Connecticut ratepayers first in the states pursuit of a zero carbon electric sector.

And quickly, Dominion Energy also support Senate Bill 952 calling for the deployment of 1000-megawatts of energy storage. A robust energy storage program can help facilitate several state policy goals, including increased resilience and reliability, as well as reduce greenhouse gas emissions, particularly when you pair storage systems with zero carbon resources, like nuclear wind, or solar Dominion Energy stands ready to partner with the state on, not only extending the life of Millstone, but also exploring the potential for other clean energy technologies, like storage to expand Millstone's role, as the clean energy hub of Connecticut, and New England. And with that, I will close and refer you to my written testimony, for more detailed information. Thank you so much.

REP. ARCONTI (109TH): Thanks, Mary, and thanks for your testimony. And, you know, I do believe the pathway that's laid out in the IRP is probably the best pathway going into 2014, with keeping Millstone online. But I do believe, you know, in a post-2029 world, it needs to be a regional solution, you know, at that point, you know, going into the future on.

So, my question to you and Dominion, I guess is have those conversations -- I know, it's still eight years away, but not that far away, you know, in energy life spent, you know. Are you having those conversations with, you know, the grid operator, ISO, in the other, you know, states in the ISO region?

LOUISE NUARA: Yes, it's a great question. And you know, we are open to a regional solution that values, and preserves Millstone's, you know, reliability benefits, and carbon free attributes

after the current contracts expire. You know, we've said that we'll work with all stakeholders, state level, regional level, even the federal level, to find a path forward for Millstone. Whether that's a regional mechanism, like the floor -- like the floor clean energy market, or the integrated clean capacity market of which are being discussed in the New England energy vision process, or whether that's an extension of the power purchase agreements that are in place right now. I think, what's important is that Millstone is just absolutely imperative to meeting our carbon reduction goals, and we'd like to extend the economic emissions, and reliability benefits of that station.

REP. ARCONTI (109TH): That, I appreciate those comments. You know I do think that reliability -- and I just like to see that regional solution, when it comes time through form those markets. Rep. Cheeseman.

REP. CHEESEMAN (37TH): Thank you, Mr. Chairman. Good see to see you, Weezie. You mentioned that the -- under the Millstone extension scenario, we could see \$5 Billion dollars, and ratepayer savings. Can you elaborate on that? Where -- did those savings come from? And the what -- you know, what's the genesis of that?

MARY LOUISE NUARA: Absolutely. So, as I said, we were pleased to see the results of DEEP's analysis, particularly with regard to the Millstone extension scenario, which as we've said shows \$5 Billion dollars in total ratepayer savings, compared to other scenarios, that assume those don't retire in 2029. And that's mainly, because Millstone's continued operation, would mean that the state -- it would basically reduce the need for the state to go out, and procure new carbon free resources to not only fill the gap of Millstone, if it were to retire. But, then to also get to the 100% zero carbon electricity goal.



And I think, what's really key here is that Millstone's energy and 100% of the plant's environmental attributes, have been locked in at a low-fixed price of \$4.99 dollars a kilowatt hour. At \$4.99 dollars a kilowatt-hour, Millstone procurement is -- continues to be one of the lowest cost grid scale resources that Connecticut has procured to date. There's actually an Appendix 6 to the IRB that lists all of the state's procurement and their associated pricing going all the way back to 2011, 60 projects in total. Millstone is one of the lowest cost resources on that list. It's the third lowest cost resource.

There's another new nuclear facility up in New Hampshire that is a bit lower in a small scale, when project in Massachusetts that's a bit lower. So, I guess, you could say Millstone is the lowest cost resource on that list for Connecticut, and in state Connecticut resource.

REP. CHEESEMAN (37TH): Yeah, then, you did share that with appendix with me, and I was fascinated, and horrified at some of the levels. And you know, we talked about the 4999, and I think, I looked at the day ahead costs and we're looking at what 8539. I mean they're significantly higher than that 4999. So, I think -- I am confident certainly in the long run, it -- you know when your oil company comes to you and says, "Hey do you want to, you know, cap your price for the year ahead going forward? You may pay a little bit of a premium. But then, you know that you're always going to be at that rate." And particularly as we've seen, what, in the past month, gasoline prices go up \$0.30 dollars, sometimes having that security, and particularly over 10-year period of knowing that we have that fixed rate is great. And thank you for your answers. Thank you, Mr. Chair. And I hope, just we see you sometime in the flesh, Weezie.

MARY LOUISE NUARA: I hope so too. Thank you, Representative.

REP. CHEESEMAN (37TH): Thank you.

MARY LOUISE NUARA: Thank you.

RICK FATTIBENE: But I have a chance to jump in, I was the previous speaker.

REP. ARCONTI (109TH): Alright. Yeah, Rick we'll get back to you. We'll circle back to you after Mary has finished with testimony. Thanks.

RICK FATTIBENE: Okay, thank you.

REP. ARCONTI (109TH): Alright. Are there any other questions or comments for Mary?

SENATOR NEEDLEMAN (33RD): I have one, for one really quick question, Mr. Chairman. Is there any potential for building out additional capacity, though?

MARY LOUISE NUARA: You know, it's a great question, and as I mentioned in my -- in my remarks, we're looking to expand Millstone as the clean energy hub of Connecticut and New England. So, you know, it's a 50 -- it's a 550-acre site. And the protected area, where the -- where the station sits is only 50 acres. So, we've got a lot of land to work with for maybe solar and storage, you know, maybe the production of hydrogen one day, it could be the location for the interconnection of offshore wind.

You know, we see a lot of possibilities at the nuclear site, particularly given the fact that it's right there sitting on the robust 345 kV system, the kV transmission system. So, we have the space to do more at that site, and we're interested in doing that.

SENATOR NEEDLEMAN (33RD): Okay, great. Thank you.

MARY LOUISE NUARA: Thank you.

REP. ARCONTI (109TH): Alright. Seeing no one else with their hands raised, thanks, Mary.

MARY LOUISE NUARA: Thank you.

WILL GINN: And I'd go back to Rick now. And then after Rick, we're going to have Cary.

RICK FATTIBENE: Hi. My name is Rick Fattibene, and can you guys hear me?

REP. ARCONTI (109TH): Yep.

RICK FATTIBENE: I like to speak in support of Bill 882, 952 and 6523. So, I'll be brief, I realized everyone's very tired. But, basically, I'm one of the very, very few owner-operated small hydroelectric plants in Connecticut. I believe there's less than five of us. And I own and operate Sandy Hook Hydro, which is in Sandy Hook Center in a suburb of Newtown, which is about 112 kilowatts, so I realized were smaller, but we do manufacture clean, renewable energy, and we do have class one credits.

What I'd like to point out is, is that I love renewable energy, and the only reason that Sandy Hook Hydro is still running, is because I've been subsidizing it with my own money for the last five years. It's been running since 2005, but for the last five years, because of the rate 980 at rates, we have been losing money every year. As an example, I put in my written testimony for year 2020, running all year long, with no mechanical breakdowns, we only grossed \$5500 dollars, and our insurance was \$7500 dollars, and that doesn't include any rents, or utilities. So, I have another plan up in East Hartford, Connecticut, that I -- is 171 kilowatts, and I would like to bring that online. But Bill 882 would much help us in making it a profitable enterprise, instead of just a big hobby going wrong.

And a side note, I also like to support Bill 952, Burnside Hydro is located in East Hartford Connecticut, which is an economic development zone, and it is an underserved community. And we are within a quarter mile of two schools. One is a magnet school, which is about 1,000 feet. And then I'd also like to Support Bill 6523, obviously, in East Hartford Connecticut, it's a lot of manufacturing. We have two manufacturing facilities inside the building, where we plan to reopen Burnside Hydro. And there's a large cell tissue company, which is about 1,000 feet of way, and that was all, I really had to say, and I really appreciate your time.

REP. ARCONTI (109TH): Thanks, Rick. Thanks for your testimony. Thanks for sticking the --

RICK FATTIBENE: You're very welcome.

REP. ARCONTI (109TH): I don't see any hands raised, so thank you.

RICK FATTIBENE: Thank you very much.

WILL GINN: Next up is Cary, and then we're gonna have Charles.

CARY LYNCH: Hello. Thank you for the opportunity, to present testimony tonight. I'm Cary Lynch, Climate and Policy Manager at The Nature Conservancy, the Connecticut chapter. We would like to provide testimony in support of post House Bill 952. So, in the interest of time, we would like to acknowledge and support PURA Chair Gillett's comments on the Bill particularly Sections 1, 2 and 3, three, which deal with energy storage.

We would also like to support Section 5 of this Bill, which allows for ETCs, to purchase an aggregate multiple solar project. This aggregation is beneficial, and that would allow for better

management of smaller solar products across the state. It is also well advised in advance of ICE in England's implementing FERC order 2222, which would allow aggregated distributed energy resources, like solar, to be offered into auction, as an energy source, and regional energy markets.

We do have certain concerns about this Bill. We are concerned about Section 6 regarding municipalities completing their own annual emission inventory reports. As someone, who is familiar with a mission inventories accurate sector wide emission calculations are not easily done. This will require DEEP, as the organizing body, to create a model for all municipalities to follow. In addition, a justification of factors, using such a model, being that there's no set standard by which states conduct their emissions inventory, this can be especially problematic, when estimation is done at the municipal level. So, beyond is establishing the methodology, data collection, can also be extremely difficult and may present issues with quality control, and privacy violations. Additionally, the administrative burden from the production of such a report can be significant. For these reasons, we would suggest eliminating the deadline for compliance, or removing the mandatory obligation for municipalities.

And then, finally, we are concerned about Section 10, which is about expediting the permitting process of solar products on farmland. There's very little detail in the section, so it is unclear if this fast tracking would be for farmland conversion to grid scale, or colocation of solar energy. So, we would humbly request much more information given, regarding this section. And that concludes my verbal testimony, thank you for the opportunity to present testimony tonight regarding House Bill 952, thank you.

REP. ARCONTI (109TH): Thanks, Cary. Rep. Mushinsky.

REP. MUSHINSKY (85TH): Cary, isn't our -- so municipalities doing the inventory already, and other states?

CARY LYNCH: Sure. But I mean again, if we're using it to justify our annual goals, I mean there has to be a set methodology, there has to be that type of data collection, quality control, it's very difficult to do. Municipalities that actually go about this process, I can't speak to them. But actually, having done it for the state, for the last couple years, it is not an easy process. And you have to justify your use of certain emission factors, data collection, where you're getting the sources, how you're doing it, it's not an easy process. So, I mean kudos to those, that do. I would just recommend it to be mandatory for every municipality, or town, or what have you, in the state of Connecticut.

REP. MUSHINSKY (85TH): Well, how about a simpler version? They would just report on what they're doing to reduce fossil fuel use in their municipality, or something like that?

CARY LYNCH: Yeah, I would be for that. I mean that would help; you know keep each municipality on-track for whatever their goals -- their particular goals will be. But, to make it mandatory and reporting to the state, as far as, you know, data collection on how the state's doing, I just don't see how that is beneficial.

REP. MUSHINSKY (85TH): Okay, but some of the towns no goals at all.

CARY LYNCH: Sure, but the state does.

REP. MUSHINSKY (85TH): Not to make them at least think about --

CARY LYNCH: Sure.

REP. MUSHINSKY (85TH): You know, what's -- going for the good of the whole community of Connecticut, because everybody has to do their part, of course.

CARY LYNCH: Sure.

REP. MUSHINSKY (85TH): Okay, thank you.

REP. ARCONTI (109TH): Thanks. I hope -- no, Senator Needleman, do you have a question? Nope. They got rid of texts a little too late. Seeing nobody else, thanks Cary.

WILL GINN: Okay. Next up, we have Charles, and then, I believe, that will be follow -- followed by Thomas. You can go, Charles.

CHARLES ROSENFELD: Am I -- am I on?

REP. ARCONTI (109TH): Yep. You're in.

CHARLES ROSENFELD: My name is Charles Rosenfield. I operate Putnam Hydropower in Putnam, and I'm speaking in support of Bills 882, 952 and 6523, which were the modifications attached to my written testimony would support a small hydro like this one and would be sound policy. This is a 650-kilowatt hydro plant, located in Putnam. We've increased its equipment in capacity from 250 kilowatts back in the 1980s to 650 kilowatts today. And, as mentioned by others you're for several months in the last year, we received less than \$0.02 dollars a kilowatt hour, and rates have been generally declining for several years. So, these plants like this are not sustainable at that kind of price, which doesn't reflect either its value to the grid, its value to the economy, or value to the environment, and the virtual net metering program with some modifications could accept small hydro projects and be beneficial.

Even though this project is located in Connecticut, it is not eligible for the Connecticut RPS, the

Renewable Portfolio Standard. Older projects like this have been excluded, even though they're, obviously renewable, and, obviously, in Connecticut. And the program modifications to these Bills, would be beneficial for policy overall.

REP. ARCONTI (109TH): Thanks. Charles. Rep. Ackert.

REP. ACKERT (8TH): I didn't want to go ahead of our good ranking member, but in lieu of time here, Charles this whole issue is driving me crazy that you are \$0.02 dollars you're getting paid, and your civic 650 kilowatt -- 640 kW. I can't even imagine how many people; you're serving with that -- with that plant. What is a -- what is a sustainable number to stay in business, and, obviously, make a little profit for -- and upgrades for a hydro plant like yours?

CHARLES ROSENFELD: It's not a simple answer. I mean the marginal -- rough, the \$0.02 dollars is approaching the marginal cost of operation. These things are capital intensive, and the expenses come in large chunks.

REP. ACKERT (8TH): Yeah.

CHARLES ROSENFELD: To develop a new hydro plant is -- you know, on the order of, you know, \$4 million dollars or \$5 million dollars a megawatt on it.

REP. ARCONTI (109TH): I think he froze.

REP. ACKERT (8TH): Frozen solid.

REP. FERRARO (117TH): Water freezes at a certain temperature.

REP. ACKERT (8TH): It's like 30 degrees out froze, but I just took to the -- to the -- we just need to address this issue. I think, somehow the Chairs of this Committee that \$0.02 dollars a kilowatt hour,



you know, is -- and these are plants -- anyways I'll stop. Charles's -- will hopefully come back, but thank you, the Chairs of this Committee.

REP. ARCONTI (109TH): Thanks, Rep. Ackert. Representative Ferraro, do you want to make a comment? Do you want to try to wait for Charles to come back?

REP. FERRARO (117TH): I'll just make a quick comment --

REP. ARCONTI (109TH): Yeah.

REP. FERRARO (117TH): To Charles and all the, I call them, the hydro warriors, who have testified today. You know, I'm just kind of sitting here all day long listening to all the sacrifices that they've made and how they pushed forward with the -- so little revenue coming in. You know, I know that we don't have a consensus among leadership. But I am looking forward to conversations that could be added, if there's something, we can do to help this industry along. They are Connecticut grid, they are carbon free, and it's -- there's something, we can do, and we'd really be a -- I'd like to be part of that conversation. That's it.

REP. ARCONTI (109TH): Thanks, Representative. Alright. Well, why don't we move on to the next person? If Charles comes back to us, we'll give him the time to answer right back in Rep. Ferraro's question.

WILL GINN: Yes, next up is actually going to be Nathan, and that's going to be followed by Thomas.

NATHAN FROHLING: Hey, thank you for hanging in, for such a long evening, and it's a pleasure to be here. So, dear Committee, Chairs Ranking Members and Members of E&T. I am Nathan Frohling, Director of External Affairs for The Nature Conservancy. And it was good to hear Cary a few moments ago. And I'm

here to testify, on behalf of Senate Bill 882, and I'll be very quick.

First, we strongly support 882 and the provision for 100% zero carbon electricity by 2040. We all know how critical it is to get into our climate change goals. We also underscore, as others have today, the importance of bringing electric generation to zero carbon into the picture, along with consumption. But we would also say that our first priority is passing 882. We have a lot of work to do to bring the generation side, but we -- you know, we must do that work, but let's make sure, we get 882 passed. Secondly, we support the amendments to the CLMN Plan -- Program, and feel very positively about the amendments there. Again, I won't go into a lot of detail, but just to save a very, very strongly in support of that said provisions. Thirdly, we also support the amendment that creates a system of accountability for EDCs when procuring class three energy sources. Given a kinetic ratepayers pay, for their programs offered by Energize Connecticut, it is certainly wanted that profits, from the sale of energy efficiency credits be used to reinvest, or reduce the rate payer burden of paying for such programs. So, strong support for that.

And, finally, we express support -- somewhat conditional support for the home energy label sections. This is important for both consumers and meeting the challenge of climate change by making financial benefit of energy efficiency, a normal part of how we do business. It is easier for buyers to make decisions for the planet, while they're also making better decisions for themselves, and we want to make sure that the details of implementation and penalties are reasonable, and support the conversation we heard today, exploring those questions.

In the end, it is most important, as I said at the beginning, that we pass 882. Hopefully, we can work

through these -- some of these questions about the home energy affordability provisions. But, let's make sure, we get this Bill across the finish line, and I'll leave it at that. Thank you so much, and I'm happy to answer any questions, if you have any.

REP. ARCONTI (109TH): Thanks, Nathan. I don't see any questions. Thanks for your testimony.

NATHAN FROHLING: Again, thank you for your perseverance tonight and the good work you're doing.

REP. ARCONTI (109TH): Thank you.

WILL GINN: Next up, we have Thomas, and that is going to be followed by Patrick.

THOMAS JACOBSEN: Good evening. Thank you so much. I know it's getting late, but I really appreciate the opportunity to provide testimony on House Bills 6527, AN ACT INCREASING THE TOTAL OUTPUT OF CLASS RESOURCES. I'm Thomas Jacobsen Co-Founder of Blue Delta Energy. We're headquartered in New Haven, and we've served as a class three RAC manager, since the inception of the program in 2008, and Blue Delta represent several combined heat and power projects in Connecticut, including those owned and operated by the Mashantucket Pequot tribe, so Foxwoods Casino, Embry Hospital, Norwalk Hospital, Middlesex Hospital, Fairfield University, Frito-Lay in Killingly, Rand-Whitney Containerboard, and Medtronic.

So Blue Delta, we are supportive of House Bill 6527, and there's really three main points I want to bring to your attention. First, and I know we've heard from Kimberly-Clark, we know that the effectiveness of the class three program, it's challenged, right now. There's an oversupply of Class three RACs. And demand in this program has been captive 4% of load for over a decade. We estimate that the market is currently at least 20% oversupplied, which means that the CHP project owners are now in a position of

vulnerability, as the class three direct strong to hold up a \$10 dollars price for. And also, as we heard from Kimberly-Clark, a lot of these RACs are now going on sold. So, under these market conditions, any new CHP projects on the horizon in Connecticut, will be unable to include revenues associated with class three racks in their project financing.

And the second point I want to make, is our clients CHP units, along with all those operating Connecticut, provide critical, consistent sources of power and thermal energy around the clock. So, these projects help Connecticut businesses decarbonize the building and industrial sectors. And, as we all know, we're living in an era, where climate change is leading to grid disruption, and emergency situations. Just look at what happened in Texas. Along these lines, I want to highlight the Superstorm Sandy experience, of one, of our clients Danbury Hospital, because of its own site CHP unit, the hospital had the power needed to keep it up and running, and unlike in New York, no patients had to be evacuated.

So, what we're seeing is that there's also a large role for CHP in the clean micro grid of the future, and we know Connecticut has a micro grid. I think the first micro grid is in Middletown that's the CHP project and solar as a part of Wesleyan University. But we can see here that clean energy technologies can operate alongside CHP for --

I would add, that we should remember the increasing role of renewable natural gas from anaerobic digestion, and other sources, as a feedstock for CHP. And the last one, I want to make is a nuance of the class three program, the majority of CHP projects have to remit 25% of the RACs to the conservation and load management fund. Each quarter, the Connecticut Energy Efficiency Fund conducted auction for the sale of these RACs, and those proceeds are used to help finance clean energy

projects in Connecticut. But because of the oversupply situation, we're in the most recent RAC auctions have generated little interest in class three RAC buyers. What this means is that those RACs are going unsold.

And we have lost dollars to the state. There's no longer -- you know these funds are, no longer available to support new investment in our clean energy economy. So, I'm done, but the final point, I want to make is, you know, 6527 is providing a solution that starts to reflect the structure of RPS programs a lot of different states around the country, and even the class one tier in Connecticut, right, where demand for renewables escalates over time.

The one thing -- again, Kimberly-Clark, brought this up earlier, that -- and I'd like to address or that should be flagged is that sunset in 2025. And I guess, I would echo the suggestion to include some sort of provision that allows for a program from you, prior to 2025, with the possibility for an adjustment to the sunset. So, that's it, I certainly appreciate your time, and I'll take any questions if there are any.

REP. ARCONTI (109TH): Thanks, Thomas. Don't see any questions from the Committee. Thanks for the story.

THOMAS JACOBSEN: Thank you.

WILL GINN: As an update to the Committee, Charles Rosenfield lost power in the middle of the testimony, and currently trying to get a generator, so, he may be back on. The -- it's ironic, but, the next person up is Patrick and that will be followed by Tom.

PATRICK MCDONNELL: Good evening, SENATOR Needleman and Representative Arconti, Members of the Committee, thank you so much for hanging in there tonight and giving me the opportunity to testify.

I'm from UIL, I think, as many of you know, and I'm here tonight to testify a number of Bills, but in the interest of time you've got my written testimony, and I just going to go through and hit the highlights, because I know it's a late hour.

First, I'd like to talk about Senate Bill 882, AN ACT CONCERNING CLIMATE CHANGE MITIGATION AND HOME ENERGY AFFORDABILITY. And we support Connecticut's decarbonization goals, we think that's important step for Connecticut. We also support the concepts in the body of the Bill around providing consumers information about energy consumption and buildings. I spent a lot of time working on that on the energy efficiency programs. I think, it's important to put that in the hands of the consumers.

The one issue with the Bill we see is the incremental procurements of energy efficiency demand response, we think those are important tools for Connecticut. We think the current network functions very well. And we're concerned about DEEP's additional procurement from the perspective, that it could be a very significant ratepayer investment. If DEEP were to move forward with that, depending on how they constructed the procurement, it could be somewhere in the neighborhood of \$150 million dollars to \$250 million dollars a year in ratepayer expense. And I would suggest the Committee -- the Committee would want to establish some costs thresholds to put in place in that provision the Bill.

Next up is ex -- earning Electric Generator Reimbursement Program requiring shareholders, to fund such a program would violate your traditional cost of service principles, and should be avoided. We're concerned that some of our income eligible population would be renters, won't be able to take advantage of the program, and we would also be concerned about the cost, if it were a ratepayer expense.

Next up is Senate Bill 937, AN ACT CONCERNING EMERGENCY RESPONSE PLANNING. We currently have an ERP at UIL. and we follow the ERP religiously during a storm event. And as many details in the plan, that layout how we would staff and how we respond to a storm event. And I think some of those different levels, based on the weather, the different tiers we have might align well with some of the provisions of the Bill, around -- particularly around the staffing requirements of -- and maybe link those staffing requirements to the category three hurricane. So, we don't have high staffing levels for a smaller storm. We also support the --

WILL GINN: Thirty seconds.

PATRICK MCDONNELL: Provisions around telecommunications providers. We recently had a situation where we were blamed by the media for an extended outage. It was actually a telecommunications outage.

Next up is Senate Bill 950, we understand the impact of trees in our community, and we look forward to the Committee, helping us find the right balance between vegetation management and maintaining reliable electric service. And next I'd like to comment on Senate Bill 952, House Bill 6527 and House Bill 6527. Embodied in those Bills are --

WILL GINN: Please wrap up.

PATRICK MCDONNELL: Many renewable energy programs, and we think that there's significant amount of ratepayer costs embodied in those. And I would encourage the Committee to examine those costs and strike a balance between advancing clean energy goals, and ratepayer impacts of those programs.

And last 6524, AN ACT CONCERNING NEW FUEL CELL ELECTRICITY GENERATION, we've got some specific suggestions, how we might make that Bill better, but

we support that Bill. And thank you, I'd be happy to answer any questions, you might have.

REP. ARCONTI (109TH): Thanks, Pat. Could you -- you know when you said, the potential impact and demand response, what then -- what sort of I don't want to handcuffs, but, you know, what sort of barriers would you put up on the procurement authority to avoid?

PATRICK MCDONNELL: Well, I think my suggestion would be, perhaps, you know, I think it's important for the Committee, and all these Bills, where we say, we're going to do a higher cap on solar, higher cap -- we're going to do battery storage, we're going to do a procurement of energy renewables. It might be good for the Committee to say, "Well, we, we think that should be no more than whatever, the appropriate dollar level is per year to be expanded on that program," as opposed to say, "We're going to do this many megawatts."

REP. ARCONTI (109TH): We heard earlier, that it would be better to not -- we do currently do V.M. and dollars, and we heard earlier testimonies, and be much more efficient to do it in megawatts. And I think that's -- I think the successor program is going to be measured in megawatts. I don't know about going with country dollars.

PATRICK MCDONNELL: Yeah, I guess my point, though, that's -- I think that's I've heard Chairman Gillett, today talk about some of the ratepayer public policy costs that we face. And, I think it's an important role for the Committee to, at least, be -- to set the public policy for what the appropriate investments are for renewable energies, well -- whether it's dollar amounts, or quantities, but to really understand what the ratepayer impacts are because so many times we see people question the public policy costs on customer Bills. And, I think it would be important for the Committee to understand, at least, even if there were megawatt



limits, to, at least, have some sense of what the dollar amount play were here before the Committee approves these incremental programs.

REP. ARCONTI (109TH): Okay. Any other questions for Pat? Seeing none, thanks, Pat.

PATRICK MCDONNELL: Thank you so much.

WILL GINN: Next up is Tom Swan, and I think after that it's William up as well.

TOM SWAN: Good evening, Senator Needleman, Representative Arconti. I've got to give also a shout out to my state Representative Ackert. You all are putting a long day, and we appreciate it. I have submitted written testimony so I'll try to be quick, and maybe add a bit to it though. We support Senate Bill 882, AN ACT CONCERNING CLIMATE CHANGE MITIGATION AND HOME ENERGY AFFORDABILITY with several caveats. One we're worried that this is step back from the Governor's Executive Order Number 3, in terms of not covering both generation and supply. And we think -- we're hoping that's a clerical error, and not something intentional. We should not be having our communities subject to fossil fuel plants that then is exported to other states. It doesn't make any sense if we're really going to be meeting our climate change.

We also think we need to do better in terms of bringing the benefits of renewable energy efficiency programs to low to moderate-income residents of Connecticut, especially renters. And some of the stuff that's in here in terms of disclosure on, you know, energy usage all on makes a lot of sense, so we think it's good. Efficiency needs to be at the center of us meeting our long-term climate change goals, and many of these residents, who are paying into these programs for years, and not benefiting at all. We strongly support the act concerning electric suppliers. Despite your all-best efforts in terms of reigning in in some of the abusive

practices, we continue to see that happen on a regular basis. And when people in the -- could have chosen to use third-party suppliers, even though it's a smaller number paid \$34 million dollars more than people on standard offer, that brings us -- that causes us a great deal of concern. We also are really concerned about the 25,000 families that are legacy to the project of automatic renewal, so we appreciate the fact that you were eliminating, that within this program this year.

We oppose 6527, AN ACT CONCERNING OF Class THREE RESOURCES. It's not something that we should be expanding if we're going to remitting our climate change goals. I also do want to talk some about 952, which was not in my written comments. We support the storage and net metering aspects of this. We have real concerns about given the EDCs, the ability to do more solar programs and everything, in large part, because of just how poorly they've been doing things over the last few years and giving them more to do. We're not convinced that giving them more is going to have them do anything better. So --

WILL GINN: Thirty seconds.

TOM SWAN: So, thank you. I'll get off. And have a great night. Really appreciate how hard you get -- you all are working.

REP. ARCONTI (109TH): Thanks, Tom. I do apologize. I missed the part. Which Bill did you say that the typo was [inaudible].

TOM SWAN: We're -- I'm not saying it is. I'm saying that 882, the fact that we're just talking about supply, and not supply in generation seems to be a significant step back from the Governor's Executive Order. I said, I hope it's a clerical error, and not something intentional, in terms of saying, that we can still have fossil fuel plants burning and running in Connecticut. But, as long as

we're buying -- theoretically buying the energy from other places, or we can be shipping that fossil fuel to other states, as long as we produce 100% renewable in Connecticut, these are important and it just doesn't make sense.

REP. ARCONTI (109TH): Look, I got you. Thanks for clarification. Rep. Ackert.

REP. ACKERT (8TH): Thank you, Mr. Chair. And thank you, Tom, for being here tonight and staying late. I know you're diligent in your efforts, and I want to agree with you. I brought up that question earlier about, you know, the fact, that we're going -- trying to go, you know, without, you know, fossil fuels being -- our energies, by not being fueled by fossil fuels, but it's imported, not self-generated in the state. So that is why I've been talking a little bit about the hydro stuff, and I agree with that, you know, we're -- I don't want to sell to my constituents, the fact that, if we're trying to go in this direction, that we say, that we're going to 100% energy use from non-fossil fuels, it's typically energy imported. So -- and that's what I wanted to make sure. Actually that we clarify that -- you brought that point but also that we have these plants in Connecticut that are -- that are -- that may be fossil fuel.

But -- I also want to thank you for your point on energy efficiency. The number one way that we can reduce energy costs is to promote, and drive energy efficiency, especially in these low-income rental units that we looked at -- to save money, that typically gets money from the light heat programs, and we -- you know, federal dollars that we put into that, so I want to thank you for bringing that attention to us also.

TOM SWAN: Thank you.

REP. ACKERT (8TH): Thank you, Mr. Chair. Thank you, Tom.

REP. ARCONTI (109TH): Thanks, Rep. I don't see any more hands up, so thanks, Tom.

TOM SWAN: Look, thank you, bye.

REP. ARCONTI (109TH): Mr. Clerk.

WILL GINN: And with that unless there's any last one, in addition, the last person to testify will be William Marion.

REP. ARCONTI (109TH): Alright, William. Bring it home [laughter].

WILLIAM MARION: Thanks, guys. I hope everybody can hear me. But thank you, Chairman Needleman and Chairman Arconti for having me on tonight to reinforce my submitted testimony in support of Bills 882, 952 and 6523. Specifically, I'm here for the small hydro operators, as one of their vendors, I own and operate Leppert-Nutmeg, which is an electric motor and generator ratepayer facility in Bloomfield Connecticut. It's a veteran-owned small business, and we've been an operation in Connecticut for over 50 years, and our one -- of our niches is the hydra generation market. And although, we serve all these generation stations in Connecticut, we also serve New England, and it's hard to see sometimes the fact that these owner operators at work so hard to keep their units up -- cannot make the improvements, cannot afford to make the improvements they need.

Our company was instrumental and Charlie Rosenfield, who you heard earlier, increasing his output, and capacity from, you know, a couple hundred kilowatts to 650 kilowatts. The technology has improved so much in turban and generators that all the stations that have fixed flows are eligible and capable of increasing their capacities. The turbines are much more fish friendly. So, for environmental concerns, you know, they are really coming up to speed. They understand the importance of the environmental

concerns on top of just generating the power. These are very dedicated individuals. And their site support a lot of other businesses, other than just mine in Connecticut and they create jobs, and they -- you know, they give electricians and painters and rights and carpenters, and a lot of other people opportunities, to work at their sites and support their utility.

And it kind of makes, me feel a little bit sad as a Connecticut resident and taxpayer, that like working all these New England states, and you know, Mass and Maine and Vermont and New Hampshire are very, very supportive of their hydro generation and these hydro operators, and Connecticut, you know, they're kind of like the forgotten stepchild. Yeah, they're there, they'll have to make it work. So, I just wanted to -- you know, my submitted testimony and to let, you know, that I think, that these guys are critical on to the overall renewable grid in the Connecticut. You know, a lot of these sites can start back up by themselves.

On a power outage so if the state goes down, they can turn themselves on without any outside power in many cases and get power back to the grid. And I think that consideration should be given those sites to. So, I -- you know renewable talked about being able to put \$10 million dollars into the Connecticut economy if they just had some rates that would support their continue operation. And so, I see that, as a win-win situation for the state of Connecticut. So, I thank you for the appreciation, for letting me testify tonight, and I learned a lot, and I was glad to hear so many people taking the renewable energy and as an important factor in the state of Connecticut, thank you.

REP. ARCONTI (109TH): Thanks, William. Yeah, thanks for your testimony. I don't see anyone with any questions, so thanks, and have a good night. I said -- was that it, Mr. Clerk?

WILL GINN: That is it, Mr. Chair.

REP. ARCONTI (109TH): Alright. I want to thank, everybody, for participating. And as a quick reminder, we have the coffee hour with [inaudible] at 10:00 A.M. if you're able to jump on, I look forward to seeing everybody again bright, and early. Other than that, you know, for next week, we will have our last public hearing on Tuesday morning. And I'm going to try to do a Committee meeting Thursday morning to put together a small agenda, to close -- a couple Bills out, and then, you know, again our bigger meetings will be the 18th, and the 23rd to JF some of the bigger concepts. So, goodnight everybody, stay safe. Public hearings officially adjourned.

REP. MESKERS (150TH): Thank you very much. Great job.

WILL GINN: Thank you, everybody. Have a good day.