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Representative David Arconti

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REPRESENTATIVES: Ackert, Allie-Brennan,  
Arconti, Arora, Buckbee,  
Cheeseman, Demicco, Ferraro,  
Foster, Gilchrest, Gresko,  
Horn, Kavros DeGraw, Meskers,  
Mushinsky, Petit, Piscope,  
Steinberg, Tercyak

REP. ARCONTI (109TH): So welcome to today's Energy and Technology Public Hearing. Just for members of the public to know, our Clerk, Will, will be calling off names of people to testify. And, you know, as your three minutes are winding down, we'll interject around 15, 30 seconds left, just to give you the heads-up that your time is running out, and to summarize, and then we will -- If any members [crosstalk] maybe -- Can we mute everybody? Thanks, Will. And I lost my train of thought. And if any members of the Committee have questions, you know, we'll be sure to call on you.

So, first up on the Public Hearing list -- Oh, in the first hour will be reserved for Public Officials, and then we'll go back and forth between Public Officials and Members of the public. And I know we had some late public officials sign up. So for the -- for the rankings in the -- my Co-chair Rep. Rosario, Representative Michelle, Representative Felipe, and Senator Champagne will also be testifying today. So with that, I will kick it over to the DEEP team, Commissioner Dykes, Deputy Commissioner Hackett, and Julia Dumaine, an Associate Economist with DEEP.

MS. DYKES: Well, good morning. Can you hear me, okay? I think it's coming through. Okay. So good

morning, Representative Arconti and Senator Needleman, Senator Formica, Representative Ferraro, and Honorable Members of the Energy and Technology Committee. It's a pleasure to join you virtually. My name is Katie Dykes, and I serve as the Commissioner of the Department of Energy and Environmental Protection. As you noted, appreciate the Committee's indulgence to also have with me today on the Zoom our Deputy Commissioner for Energy, Vicky Hackett, and Associate Economist, Julia Dumaine, who serve at DEEP.

I'm gonna keep this brief, [laughs] or try to. The focus of our testimony today will be on those bills that were submitted to the Committee by DEEP, and appreciate the Committee raising these Bills. And I'll just briefly highlight them as we've submitted extensive written testimony that I'll commend to the Committee's attention.

Senate Bill 856 is an Act increasing representation on the Energy Conservation Management Board. We have made engagement with low-income residential consumers, as well as with partnership with municipalities, a real focus for the Department. And we believe that, expanding the composition of the Board to include designees for those entities would be very positive and contribute to the deliberations of the Board comprehensively on behalf of all ratepayers that participate in these energy-saving programs.

Senate Bill 863 is an Act concerning energy efficiency standards. I just -- I know that this is one that has been considered by the Committee in years past. I will just note that energy efficiency standards for these products, if this bill is enacted by the State, would save the ratepayers of Connecticut an estimated \$59 million dollars in energy bill costs per year. It's hard to point to, you know, other agenda items, I think before -- that we could bring before the Committee, that would have

more of an impact in saving ratepayers money, than this -- than this Bill.

So look forward to working with the -- answering any questions. As I know that there's some updates that we've incorporated here based on past iterations of this bill in prior sessions.

Next alternative Senate Bill 862, which is an act limiting eligibility for the Residential Solar Investment Program and preventing distributed energy generation solicitations from segregating large projects. This Bill seeks to clarify that the small residential solar projects that need the Connecticut Green Bank's eligibility criteria for participation in the RSIP Program are participating -- prohibited from participating in the small Zero Emission Renewable Energy Certificate or ZREC program even after the RSIP reaches its statutory cap. Similarly, as -- And the Bill also addresses situations where solar projects that are larger than certain established sized caps for the LREC and ZREC programs have artificially segregated their projects into smaller projects with separate meters to take advantage of the higher incentive levels offered by these programs. These are incentives that are attended for smaller projects.

So in essence -- in this -- in the limited time to summarize this -- our testimony, I'll just say that these are both really important programs that are supporting, behind the meter, our distributed generation, that's saving money for ratepayers while contributing to our greenhouse gas goals. And we believe that this Bill will help to update and refine the programs to ensure that they're meeting their intended purpose of providing cost-effective support for different size classes of solar and renewable projects.

House Bill 6409 is an Act concerning the solicitation of biogas injection proposals from anaerobic digestion facilities. I'll say that the -

- this is an important bill that can help address the waste crisis that we're experiencing in the State. As some of our traditional methods that we've relied on for disposal, like waste to energy are becoming more costly to operate or that capacity maybe diminishing. And so, having more flexibility and opportunities for DEEP to be able to procure anaerobic digestion facilities that can help divert organic material, like food scraps out of our municipal solid waste stream, will contribute significantly to providing municipalities and businesses across the State with more cost-effective, affordable, and ultimately sustainable -- environmentally sustainable opportunities for managing our waste.

House Bill 6413 is an Act requiring a study of municipal -- Sorry. House Bill 6413 is an Act requiring a study of Municipal Energy Security Authority. I just note that that was not a proposal that DEEP asked the Committee to raise, but we've submitted some written testimony on that one. I think we have had great success with our statewide Microgrid Program that DEEP has been implementing in the wake of Hurricane Irene and Superstorm Sandy. It's a very successful program. It was recently expanded in the groundbreaking energy bill that came in this special session. And we think that -- We look forward to engaging with municipalities and with the Committee on the future of that program, which we believe has -- that this Bill would duplicate.

Finally, I would also like to speak to House Bill 6412, which is an Act concerning a low-carbon fuel blend of heating oil, and the establishment of a bioheat advisory board. DEEP has submitted some written testimony, highlighting some concerns that we have with the Bill as drafted. And we suggested the low carbon fuel blend mandate that within the Bill be included in the study portion of the Bill, rather than advancing prior to such study. We had the pleasure of investigating the opportunities

around biodiesel in our draft in great resource plan. And we think that it's best really addressed comprehensively in the Comprehensive Energy Strategy, which we will be launching very shortly.

So we'd be delighted to hear any questions that the Committee has about our testimony on any of these Bills. Most importantly, just want to thank the Committee for raising the Bills that DEEP submitted, and for this opportunity to testify before you today. And we look forward to working with you throughout the session.

REP. ARCONTI (109TH): Thank you, Commissioner, and thank you for your testimony. And always thank you -- always great working with you and your team on all these issues. So for Members, just raise your hand using the 'Raise your hand' function, and we'll call on you. I have just two quick questions. First one, in relation to the Biogas Bill, how many anaerobic digesters would you see potentially, you know, coming online? You know, given the legislation we have in front of us, and also the legislation on the environment side of the -- the Environment Committee side of the ledger, you know, working on. We can't hear you.

MS. DYKES: Got it.

REP. ARCONTI (109TH): Okay.

MS. DYKES: Yeah, thank you. So we have -- we are -- DEEP as in parallel with our work in testifying on these bills this session. We are also engaging through the Connecticut Coalition on Sustainable Materials Management in an organics infrastructure initiative, that we're gonna have a kickoff meeting for on February 26th, where we're going to be exploring precisely that question of what quantity of anaerobic digestion. And other types of organics processing infrastructure, is optimal for the State to develop to be able to take a big bite out of, or,

you know, to substantially accelerate the diversion of food scraps and organics.

This -- I think that this quantity that -- of procurement authority that we have, and again, haven't had the opportunity to testify on the Environment Committee proposal just yet, so we're -- we'll be looking at those details. But that would be more than sufficient at this time to address or to receive the food scraps in organic material that is available in the State. So, I think this is -- this gives us a comfortable amount of capacity or procurement authority to be able to make strides in -- in this -- in addressing food waste in organics diversion.

REP. ARCONTI (109TH): Okay, thanks. I think some other members will have questions on that Bill, too. And then, one more question from me is on the Energy Efficiency Standards Bill. You know, as we know, right, when products become more efficient, and as our homes and buildings become more efficient, it means less electricity that's being sold by the utilities to these customers. And since we, you know, allow for revenue decoupling in our State, that can sometimes lead to an increase in distribution rates. So, you know, when it comes to ratepayers saving money, what do you think the actual, you know, number is? Since there is the chance of the distribution side of that bill ticking up a bit, the more we deploy energy efficiency products?

MS. DYKES: Just to clarify, Representative, what would be the actual amount of savings, for example? I think we -- we've estimated that the standards included in this Bill, if they were to go into effect in 2023, would save about 124-gigawatt hours of electricity by 2026, or the equivalent of 32,000 metric tons of carbon, two billion gallons of water, annually, as well. So it's a very substantial amount of reductions.

I'll also say that this is without having to, you know -- these standards, basically when they were built into the design of appliances and what consumers are purchasing, we don't have to -- You know, they are -- they are some of the most cost-effective and the most valuable in terms of -- you don't have to separately administer an Energy Efficiency Program to capture in these types of savings. They're just built into the design of the product. So that's why they are -- do have such a substantial benefit to customers and to ratepayers.

MS. HACKETT: I can also just talk a little bit about the impact of decoupling of these programs on decoupling just sort of at a high level. So yes, one of the -- I think the intents of decoupling was to remove the disincentive for utilities to engage in energy efficiency, right? But it's not just energy efficiency that's going to have an impact on the flow of revenues under decoupling, it's the whole variety of things that are being rolled out on the grid, including solar, including -- in particular, when we look at electric vehicles. You know, when you start balancing all of these things against each other. We could be heading into a place where decoupling really starts working to the benefit of ratepayers as more electric vehicles come onto the grid, and more kilowatt-hours are being realized in off-peak hours, for example, and -- you know, very efficiently.

So, you know, I think, when you look at decoupling, you know, there are pluses and minuses associated with it. But you kind of have to look at it holistically across the board. And there are different approaches to decoupling, you know, in different jurisdictions, as well. And we'd be happy to engage more on that, or, you know -- you know, talk more about that, but I -- but I think there are a variety of things that could impact the decoupling approach that we have, as we roll forward with electrification and grid modernization.

REP. ARCONTI (109TH): Yeah. You know, I am -- I am interested in exploring that more holistically because I -- you know, as we move towards electrification. I am just concerned on the distribution side of the Bill, you know, for ratepayers 'cause -- and -- Could you just -- I mean, could you explain for the Committee? I know this is a -- I know -- I think this is a new concept that the Committee is hearing about and Members. And I know I've -- we -- we've discussed, it has -- it's become something I've become more interested in. But could you explain like how decoupling works in Connecticut?

MS. HACKETT: I'll give it a shot. So basically what -- the intent of decoupling is to make sure that the utilities are made whole for what, you know, what they're earning over time. So when you have energy efficiency bringing revenues down, the utilities still need to recover, the theory is, that utilities still recover the costs of, you know, the system of maintaining the system. So those costs then, you know, some of those costs, if energy use goes down, the utilities are made whole, but if the energy use goes up, customers are made whole.

And so that's something that's important to consider as we roll forward, because we are looking at a future with electrification where energy use, you know, is very likely to go up. Especially, given the very innovative programs that are being designed, you know, through pure grid modernization, with electric vehicle charging in off-peak hours and managed charging. And as we move forward with demand response, for example, within our energy efficiency programs and elsewhere. We're really gonna have an opportunity to manage the grid much more efficiently. And some of that -- those extra kilowatt-hours that get generated during the off-peak hours, you know, those revenues will flow back to customers under decoupling. So it's, you know -- I think, you know, we have to think about the full picture when we're -- when we're looking at it.



And, you know, happy to dig in a little bit more on that and engage more on that, but, you know, that's kind of the -- I think the, high level, as we look forward.

REP. ARCONTI (109TH): Okay. No, I appreciate that. You know, 'cause just from my very basic understanding of it, you know, electricity sales goes -- go down, but, you know, rates still potentially go up through some of the decoupling measures. But I don't want to monopolize time here. I'm gonna call in some more members. Okay. Representative Foster.

REP. FOSTER (57TH): Thank you so much, Commissioner, for being here. Thank you for the opportunity to ask questions, Chairman. I am -- I am hopeful that you might be able to talk a little bit more specifically about House Bill related to biogas injection. So I feel like the very first in the Bill mentioned thing is about on-farm generation through natural gas pipelines. But it is my understanding that there's only one farm-based anaerobic digester like through the construction process, and that there's a lot of holdup in the permitting process for the other farm-based anaerobic digesters that are going forward.

So how -- is there a way to ensure that this process, as you're soliciting these additional proposals, that there's a way to make sure that our farm-based anaerobic digesters aren't left behind? I was disappointed to hear that, you know, since the legislation was passed related to indirect digesters, that there -- there's been sort of an explosion of food waste diversion, that's super important. It's great for the environment. It's this great solution for municipal solid waste issues, but our farms want to be an environmental ally and mitigate their environmental impact, and they're eager to get involved in doing this work.

So what are -- what is being done to make sure that they're able to be a part of the solution that they're working so hard to be that?

MS. DYKES: Great question. So, first, I'll say that we're really excited and enthusiastic about the interest in on-farm, as well as a commercial-scale anaerobic digestion in the State. We have been developed -- we're developing a factsheet for developers about DEEP's permitting process, with respect to on-farm. I think that we have -- you know, as we've permitted the first on-farm anaerobic digester, you know, it's been a helpful test case for our staff to gain familiarity with the -- with the technologies and how they align to the federal standards that we have delegated authority to address in our permanent processes. We are committed to -- you know, with establishing expected timeframes for permit decisions and other best practices to ensure that developers have a predictable timeframe for when they'll receive a decision.

One of the challenges that we've run into, I think in some context is with respect to air -- the air permitting piece specifically because Connecticut, it has a uniquely challenging time meeting federal air quality standards. Again, largely because of pollution that's blowing into our State, that's already very high in air pollution levels. That means that we have stricter standards than even some of our neighboring states, like New York, that we might be compared to, in terms of how the -- you know, meeting those air emission standards.

So when -- I think we've had some -- heard some comparisons of our permitting timeframes to neighboring states, and that is one of the -- one of the -- one of the issues. But we've been talking within -- in dialogue with the Farm Bureau, we've -- we're developing the factsheet for developers to understand how to go through the process. We've established a concierge service within DEEP, that is

providing, you know, one-to-one point of contact for developers so that they know exactly where they are in the process, and any questions or issues that are outstanding or data that we need to be able to expedite the review of a -- of a permanent decision. So that -- that has also been very helpful.

And again, I mentioned the meeting -- the kickoff meeting we'll have on the Organics Infrastructure Initiative on February 26, includes a portion of that meeting that will be focused specifically on what DEEP can do to accelerate our permitting process for anaerobic digestion on-farm and commercial. So we're excited about continuing that dialogue. Obviously, anything that we can be doing within our permanent processes to get more of this infrastructure developed in a way that's -- you know within the permitting requirements we want to -- we want to be doing that so that we can, again, support the aggressive diversion goals that will bring more affordable waste and sustainable waste solutions to our State.

REP. FOSTER (57TH): I appreciate that. Thank you. And it sounds like you're doing a lot of work that's sort of meaningfully moving this along. I just -- I feel like my -- Intellectually and logically, as I wrap my brain around the air permit being the one that's the biggest challenge -- Board is on-farm anaerobic digesters, like, I just can't like logically wrap my head around. It seems like this mitigates their air impact, and so that would be the thing holding up the anaerobic digesters in their permitting process themes. Like, you know -- I -- just can't wrap my head around how that that's where the delays are frequently coming from. It doesn't -- It doesn't seem -- It seems like that this mitigates their environmental and air quality impact that shouldn't be anything that becomes the source of delay.

So I'm eager to, and I know that this is going to go before the entire -- but I'm eager to know what

should be done, so that that isn't a stumbling block. We're talking about, you know, partners who just really want to be an environmental ally. So I think that -- I'm eager to see that that process be improved, and moved forward. Thank you.

MS. DYKES: Great. Yeah, there are emissions associate -- air emissions associated with the equipment that we'd be happy to follow-up offline. We'll share the factsheet and the information about the meeting on the 26th. And, of course, we know that this is a topic that will be coming up in the Environment Committee, as well. So, I'm glad to -- I'm just delighted that about all the interest and momentum on working on these issues, and DEEP wants to be -- is eager to be a partner in helping get -- move this infrastructure forward.

REP. ARCONTI (109TH): Thanks, Rep. Foster. Next Representative Ackert, then Representative Gresko.

REP. ACKERT (8TH): Thank you, Mr. Chairman, I appreciate the time. Commissioner, great to see you, as always. A couple of questions. I hope everyone can hear me all right on this. But a couple of questions on the energy efficiency standards, I've brought it up in the past, an area that has been is like the re-marketing of appliance, whether residential or commercial, is that still gonna be an opportunity for people to -- for the purchase of an appliance that -- you know, I see a lot of small appliance stores that are used appliances. Most of those are in the areas of the low-income communities, where -- and I get it, you know, I just bought a refrigerator recently and, you know, a month's salary to buy a refrigerator almost. And it's just expensive.

So I didn't know, is there -- is there a market for -- Will there be still a market for appliances and other equipment that is -- that is used in -- especially on the commercial side where, you know, that market, where these -- you know, these

restaurants, they're buying \$10, \$15 thousand dollar pieces of equipment for their -- And again, they would want to be energy efficient but you know, when they're spending, you know, a third of the price to get a piece of equipment, will there still be a market for that?

MS. DYKES: Great. So first I'll clarify that these standards will apply to new products only. So again, it's -- we're not gonna be policing used equipment, but the focus is on, as these appliances turnover, applying these standards to new products will ensure that over time, with the least disruption to consumers, that we have the benefit of more efficient equipment operating on our electric grid.

I'll also just -- I just want to underscore that the products in this Bill are cost-competitive with non-compliant products. Sometimes it could be a -- you know, a misperception that the -- these products will actually cost more money than less efficient appliances that's -- even for the upfront costs, and that's not necessarily the case for all equipment. In some cases, it may be true. But the primary goal of this is to provide forward transparency for consumers, you know, that -- about the full life cycle, the full operating costs that are associated with these -- with this equipment. I want to invite -- I know, Julia has been our expert on this. So in case, there's anything else to add there, but we think it's a -- just a real big cost saver for consumers.

MS. DUMAINE (CT DEEP): Thank you, Commissioner. Yes, that's correct. And the two commercial products that are currently included in this Bill both have a payback period of about a year. So after the initial upfront costs, the incremental costs will be zero, and they will only be getting savings. But this, again, applies to new products that are purchased.

REP. ACKERT (8TH): Thanks, Julia. I appreciate your question. So, I do understand that if the wholesalers come into an area like unknowing one, that the equipment will be consistent from state to state. Like, that was a key, and they said, "And that will be essentially what mitigates the additional cost, if there was any, to the consumer." So that was a good comment I did get from them. The number is staggering that you sent out, though, the 59 million, and that's impressive.

And then I -- then I'm glad, you know, Chair Arconti brought up the decoupling, cause we've seen that. Where everybody's kind of reducing their energy costs, but it doesn't seem to reduce -- reducing their energy use, but they don't seem to reduce their electric bill, I should say. So when I do know the rate cases and how that works out. But very interesting on the savings side, look forward to that. That actually come to fruition, and to help our consumers.

Then lastly, just to comment, I echo Representative Foster's concerns on the digesters. I know we worked diligently on a digester in Southington, and that it was held up. They were almost gonna lose their contract, and we ended up helping. And it was an air quality permitting that really almost cost that project. And now that's been a very successful project. So I will leave that, so others can comment. But thank you, Commissioner, and your staff. I truly appreciate the time. I look forward to moving these things along.

REP. ARCONTI (109TH): Thanks, Rep. Representative Gresko. And then, following Joe will be Representative Mary Mushinsky.

REP. GRESKO (121ST): Thank you, Mr. Chair. Thank you, Commissioner. In regards to 6412, I was wondering if you would, instead of sending the mandate language off to the CEP, whether you would be willing to engage in potential language tweaks in

the existing Bill? You know, we've been waiting for some years now to move ahead with this. Even as New York and Rhode Island and Massachusetts even has their own Thermal REx program going forward, I just would rather, you know, engage in this -- this session, if possible, rather than waiting for the CEP.

MS. DYKES: Well, thank you for that. And we certainly would welcome the opportunity to have dialogue with the Committee on the proposal. Just a few things that I'll just highlight from our written testimony, we noted that this bill would extensively broaden the mandate to new fuels, including cellulosic biofuels, other types of items that we've not -- ethanol, biomass, things that were not included in the scope of what DEEP was asked to study in the IRP. So, you know, we have some questions about the availability of those fuel sources and their relative value with respect to reducing harmful emissions.

Also had some questions with respect to the governance of this mandate by the Bioheat Advisory Board. And just sort of how that piece would operate, but certainly, you know, these are all things we recognize that there's a lot of interest in this, and we want to be a partner in talking through and raising the issues and having good dialogue with the Committee. And so I'll just recommend again, our written testimony where we tried to lay out some of those questions that we had as we were reviewing it. And look forward to talking with you further on this particular proposal.

REP. GRESKO (121ST): Well, thank you, Commissioner. It's just to see the states around us having the success in -- in doing this for some years now, I would like Connecticut to jump on board. So, well, Mr. Chair, thank you.

REP. ARCONTI (109TH): Thanks, Joe. Representative Mushinsky, and then Representative Gilchrest. And then, Representative Meskers.

REP. MUSHINSKY (85TH): Good morning, Commissioner. Good morning, Commissioner. I wanted to ask a question about the Energy Efficiency Standards, Bill 863, Electric and Water. A couple of questions.

One is, I was alerted to the fact that the federal standards now be weakened in a couple of areas from our stronger state standards. In the previous federal administration, there was a watering down of the standards in a couple of cases at the request of the previous President. And so, I don't want us to be tied to federal standards if the federal standards are going to be decreasing in efficiency. I know water and I think air-conditioners was the other one, but there may be more than that. They were going to be weaker than the previous standards. So I'm hoping that this Bill, which might be your department though, I don't know. But I'm hoping that this bill will decouple us from weaker federal standards and allow us to keep our stronger standards. That's point one.

And then, point two. You've got to -- what was previously a shall in here has now turned into a may. And, let's see where it is. It's in -- It's in Line 595, shall to a may. And I wonder why you're doing that. Are you thinking that the new federal administration will tighten the standards again, and we don't have to? Or you just don't have enough staff? Or what's the reason for the shall to a may?

MS. DYKES: Great. Thank you, Representative. So, first off, with respect to the relationship of this bill and this -- these standards at the State level here in Connecticut and federal standards, I'll say that we're, you know, glad to see under the new administration in Washington, a commitment to addressing appliance standards is as part of the



work of the Department of Energy. And we hope that that will mean an end to the -- to the rollbacks and the -- and the delays and the weakening of applying standards, which are some of the most cost-saving measures and emission savings measures available to us in the energy sector.

I will say that Connecticut would not be alone in adopting these standards. You know, we - we want to balance having stringent standards that are affordable for consumers in terms of upfront costs, but are also aligned with what other leading states are doing. And so we have -- our product efficiency organizations are coordinating to ensure a common approach to standards across these states, so that we can simplify compliance for manufacturers. And we know Hawaii, Colorado, Nevada, Vermont, and Washington have passed similar legislation to this in 2019, and California has already adopted many of these standards.

So we think that they're very effective. They're very robust. They are aligned in the marketplace with what other states are doing. And furthermore, if Connecticut doesn't adopt this bill, given the progress in other states, we expect that inefficient products will effectively end up being dumped into Connecticut's market by manufacturers that can't sell their products in states that have passed standards. With respect to your question on line 595, I'm gonna turn over to my team for that -- that one. I'm just pulling up the Bill.

REP. FOSTER (57TH): Yup. So thank you for that -- for that question. So it's not in attempt to sort of weaken our authority but really just -- We are including very specific standards in this Bill, so we -- you know, we don't have to do REGS. We don't want to have to do REGS to implement the very specific standards that are included in this Bill. And so then, giving us the discretion to do REGS later as the markets change, or depending on what happens in other states, and federally, you know,

just -- it just increases our discretion, and our ability to watch the markets and see, you know, what's been developing.

REP. MUSHINSKY (85TH): Okay. So, you're confident that, even though we change the shall to a may, you'll still be able to keep up with the most efficient standard nationally?

REP. FOSTER (57TH): Yes.

REP. MUSHINSKY (85TH): Okay. All right. That makes me feel more comfortable. Is this the Department's Bill?

REP. FOSTER (57TH): It is, yes.

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

REP. ARCONTI (109TH): Thanks, Representative. Representative Gilchrest, followed by Representative Meskers.

REP. GILCHREST (18TH): Thank you, Mr. Chair. Hello Commissioner, good to see you. I was late, so I apologize if I've missed this, but I'm interested in hearing more from your perspective on Senate Bill 855, the Decoupling Bill. So just wondering if you could share some of the history in Connecticut on how PURA and DEEP have either worked together or worked separate in the past? I'm also interested in knowing how the two departments relate -- or not two departments, how the two entities relate to one another right now? And then, my final question would be, do you believe that the decoupling would benefit the consumer here in Connecticut?

MS. DYKES: Right. Well, thank you so much for those questions, Representative. So first, I'll say that the -- this is a proposal that -- I'm presenting testimony on behalf of the Department, but I'll say that this is something that has, you

know -- I'm also representing here the position of the administration of the Governor, and the administration is opposed to this -- to this proposal. DEEP, the Public Utility Regulatory Authority has been part of -- Well, it dates back to Public Act 1180 in 2011, when the General Assembly and with the support from the Malloy Administration pursued a path of merging Energy and Environment under one combined agency. That process not only put the former Department of Public Utility Control within DEEP, but it also created a Bureau of Energy and Technology Policy which has -- was given responsibilities for developing policies for the state to ensure that we could have a forward-looking energy policy to address affordable and reliable and decarbonized clean energy for the State of Connecticut. Which DEEP accomplishes in that Bureau of Energy and Technology Policy through a policy process, like the Comprehensive Energy Strategy, the Integrated Resource Plan, and so on and so forth.

I will say that the -- this arrangement of having the Department of Public Utility Control or the Utility Commission within DEEP, still retains all of the independence of the Utility Commission when it's operating and its adjudicative function. The UAPA, Administrative Procedures Act applies to those proceedings just as it did when the DPUC was a separate entity. DEEP is a party before PURA, in its judicatory proceedings, and those ex parte rules apply. It's hard to imagine -- you know, DEEP does not have communication, or direct the decisions of the -- of the Commissioners of PURA, and as they act in that adjudicative function.

It's hard to imagine -- hard to think of an entity that operates -- an adjudicative entity that operates with more independence, and exercises more authority over a large section of our economy than the Public Utilities Regulatory Authority. And I have great respect for the work that they do, and personal familiarity with how they operate

independently, having served as a Commissioner at PURA, in the past.

So -- But that said, I think that we've achieved budget savings for the State, from having this combined department. They are a precedent in other states for having this type of -- of a construct. I think that it has benefited our State and - and the ratepayers from having this -- this organizational structure. And in my view, it does not -- it has not compromised the independent adjudicatory function of PURA to -- to have this structure. But appreciate the opportunity to speak to this -- to this proposal.

REP. GILCHREST (18TH): Thank you, Commissioner. And then that final question, do you think that decoupling would in any way benefit our -- the consumer in the State?

MS. DYKES: I don't think it would. I don't think - - I think it would have fiscal implications for the State in terms of budget impacts. I don't think it would change anything about how PURA conducts its work. And so, therefore, I don't think that it would have a benefit for ratepayers to -- if this bill were enacted.

REP. GILCHREST (18TH): Thank you. I appreciate your answers. Thank you, Mr. Chair.

REP. ARCONTI (109TH): Thanks, Representative. Just some follow-up questions on -- Representative Gilchrest, the decoupling questions. So previous to 2011, were the ratepayers dis-served by having -- by these two entities, not combined? I'm looking for a little bit more of the historical part, too, Commissioner. You know, this Public Act eliminated, that was before my time in the legislature, so I missed all the -- all the hoopla around it.

MS. DYKES: Well, I'll say that I wasn't here in Connecticut. I wasn't working in the department

prior to -- or in Connecticut, prior to the enactment of Public Act 1180, so I can't personally speak to that. But I will say that -- I think that there are a lot of benefits that the ratepayers get from this structure. First and foremost, we have -- through the Bureau of Energy and Technology Policy, which didn't exist prior to 2011, you have an entity working on behalf of the State directing developing forward-looking energy policy, that can inform -- you know, inform policy that the legislature is considering, that we -- DEEP brings those policy viewpoints as a party before PURA for their consideration.

The Bureau of Energy and Technology Policy also is able to provide for some independence, which -- with respect to functions that otherwise are delegated to the utilities in other states, for example, with respect to the procurements of grid-scale renewable resources. You know, DEEP has Oversight together with the Office of Consumer Counsel and the Attorney General's office over procurements for -- of grid-scale renewables, and that introduces a certain level of a check on any conflicts of interest for the utilities in running those procurements, particularly when they have affiliates that may be bidding into those transactions.

As that's just one example, but I think that -- I would say this [laughs] -- this structure of having -- you know, that we have in the State, I think serves us -- serves us very well. I think that we implemented it with -- you know, we have very talented staff. We are able to provide for, again, forward-looking policy, proactive policy, tackling all sorts of issues on behalf of the State and ratepayers through the Energy Policy Bureau. At the same time, you have the benefit of the integrity, the same integrity of an independent adjudicatory body within the Utility Commission that you had prior to 2011, under the structure.

REP. ARCONTI (109TH): Has any other -- I haven't been able to find -- This is a good question for me to ask. I was just wondering if you knew off the top of your head, if any other state or jurisdiction has mirrored our new model since we enacted it, and kind of developed it over the last 10 years or so?

MS. DYKES: I'll say the State of Massachusetts, I think might have been. And again, I can't -- I know that they have this model as well, and that might have been one of the -- like the inspiration for Connecticut in pursuing this merged agency. You know, although I'll say, in Massachusetts, the commissioners in the Utility Commission have less independence than our commissioners at PURA because those commissioners in Massachusetts serve at the pleasure of the Governor, instead of having defined terms, for example, which again, is another important element that protects the independence of the -- an independent judgment of the commissioners at PURA.

There are a lot of other examples, I think, of the benefits of having this -- this merged agency. You know, particularly, as you think about some of the challenges that we encounter around citing of renewables, you know, ensuring -- the commission, I can speak to just a number of different [laughs] policies that I think the legislature, the General Assembly has prioritized in recent years. That DEEP has been able to respond to, by virtue of having a consolidated agency. The Commission on Environmental Standards, for example, which was elemental in the -- in the Offshore Wind Bill, that passed on a bipartisan basis, was an example of DEEP being able to leverage our role in overseeing grid-scale procurements to ensure that -- as well as our -- the expertise of our natural resources staff. And our Long Island Sound experts in convening a process that informed criteria that were included into the -- in the grid-scale RFP that otherwise would have had to be deferred to the utilities to

ensure that those issues were considered. So I just give you that as one example.

The discussion around anaerobic digestion today, DEEP has a mission within our Environmental Quality branch of addressing solid waste issues in the State. But there's a nexus there with energy development in terms of the types of anaerobic digestion infrastructure that we need to deploy, to meet those goals.

So I just highlight those as just a few -- I see these examples every single day on this job, having come from the energy side of DEEP, but now having the pleasure to service the Commissioner, I think that the taxpayers and the ratepayers of the state are getting tremendous value and better decision-making from the Executive Branch as a result of having all of these entities within one room as opposed to doing it in separate silos.

REP. ARCONTI (109TH): Yeah. Thanks, Commissioner. Now, I think it's important for us. You know, we, as a part-time legislature, we don't get to live and breathe it every day, you know, like you. Even though I think we'd be better served if we were a little bit more full-time. But I think it's important to have, you know, the public get to hear about all the -- all the stuff that's happening, you know, under your umbrella.

Representative Meskers. And then, I know Representative Steinberg did have his hand up, but I don't see it anymore, but he has the floor after Steve, if he still wants it.

REP. MESKERS (150TH): Thank you, Mr. Chairman. Commissioner Dykes, it's always a pleasure to hear from you. I'd only make one observation slash criticism in your commentary on energy savings, and I would encourage you to not let the other shoe drop on my favorite topic, which is, Third-party energy suppliers. Because I think you were mentioning the

order -- on the order of \$59 million dollars potentially in energy savings. And I believe we're standing with third-party energy suppliers with surcharges on the order of, I get somewhere between \$40 and \$55 million dollars.

So, while that may not be explicitly within your purview in the regulatory process and the standardization of contracts, I think both the Committee and yourself, we need to work diligently to eliminate the surcharges so that Third-party energy suppliers have a level playing field. But consumers on what is essentially commodity are receiving fair pricing on the product they purchased, so the contracts have more transparency. So I will continue to beat away that issue, and I encourage you there.

I wanted to move on to the commentary that I think my Chair Arconti alluded to, which was on distributed energy costs. And I think it's important for us as a State and for the consumers and for yourselves, obviously, that, as we move forward with more efficient grid, when we -- more energy efficiency that -- We're moving into a process of dollars and cents related to consumption. There's gonna be a larger and larger percentage of the Bill that is gonna be part of the distributed -- or the cost of distribution, on the nature of the components of the distributed part of the Bill, and on the nature of the grid itself.

So I would encourage you in your metrics and the approval process for the utilities, that -- I want to know what they're doing on the grid, on the stability of the grid. But I also want to know what their investment that we're approving with a capital return of, what, eight, nine, seven-and three-quarter percent, whatever that hurdle rate on capital -- on their capital investments, that we have set empirically a goal to reduce the cost of distributed energy so that they are regulating themselves into a lower cost because there -- We're



getting a savings on the distributed cost of energy, and they're recognizing a saving. I'm concerned that the business model -- I'm starting to look at the insurance industry as related to healthcare costs.

If the model is an assumed rate of return of seven-and-three-quarters or whatever, on capital investments, for the infrastructure, for the grid, the incentive to continue to expand the capital is going to be apart from the idea of more efficient distribution of capital, or distributed energy, because you're getting a guaranteed return. So you're gonna want this, the nicest, shiniest, brightest project built, because you're putting the bid to the ratepayer. So I encourage us to look at where we can go with making sure there's a metric goal to fundamentally get us to a lower per kilowatt distributed cost of energy in the capital investments from the -- from those companies. And I -- Can you comment on that? Am I off base? Or is there something we're missing there or can -- How can we help you?

MS. DYKES: Well, thank you for that, Representative. First, we are happy to continue to work on supplier issues. It's -- There are many different components to an effective strategy to reducing costs and making energy costs that actual consumers pay, more affordable. And we have to ensure that, as we work to lower those costs on energy supply, on how energy is transmitted and distributed. We can't forget the retail portion of the system. And so, I appreciate your continued focus on that, and we're happy to continue to efforts on that -- on that front.

I will say with -- I was smiling when you were talking about the ROE and so on, because, I think, as what you're describing in terms of this transition that we need to make, really aligns well with the direction in the Bill that passed out of the special session last year on transitioning to

performance-based rate-making -- performance-based regulation of the electric utilities. In the good old days, you know, Post-World War II, we wanted utilities just to expand service and provide more access to electricity, and so the ROE was fairly simply defined around, you know, high ROEs based on capital, putting capital in the ground and building infrastructure.

And now, we have a different challenge. We need to ensure that the utilities are providing reliable service, that they are effectively dispatching, operating, and integrating distributed energy resources, including storage resources that are proliferating on customer -- on the customer side of the meter so that we get more value out of those assets. We need to ensure that they are really -- their interests are aligned with the interests of their customers in helping to get the most value out of investments at the least cost. And so, we're looking forward to, and I know this is something that Governor Lamont is very focused on, and interested in. And so, for that reason, we're looking forward to presenting concepts on performance-based regulation to PURA, as they move forward with the docket that was -- is initiated pursuant to the Bill from this special session.

REP. MESKERS (150TH): Okay. So I hear -- I hear you. And I heard -- You know, the issue of storage obviously has a cost component, and I'm supportive because I understand stranded costs and, you know, I'm getting up to speed on energy. I guess -- I want to make sure there's a metric in there, as well as that we're driving the long-term cost to the infrastructure. Or the assets we're proving or the deployment of capital from the grid is going to drive down that distributed cost. Or they can make some assurances that, you know, we're either getting stability at a high price or stability at a modicum of price with -- but it's gotta be lower distributed cost over time, if possible.

Then lastly, on the biogas. I think it would be helpful, and I certainly would love to help in -- in negotiation with the municipalities. I mean, I can't speak for Stamford, but they're a soda can throw away from me, geographically, and I've got -- we've got Greenwich, and that population density is about 300,000 combined. So I'd love us to see if we can't figure out how we can hijack the municipalities to think about that anaerobic digestion process, and maybe work on supply contracts that the municipalities -- Given -- I mean, the price differential is about 60 bucks versus 120 --

MS. DYKES: Yes. Yes. [laughs]

REP. MESKERS (150TH): Organic versus landfill. So, maybe we can do some promotional stuff, and figure out how we can get something working. And I commit to helping arrange any of the meetings down here, if we can do --

MS. DYKES: Well, I appreciate that. And we've had great participation for Greenwich, for example, in the Connecticut Coalition for Sustainable Materials Management. And you know, the tip fee for -- you know, disposal at a waste energy facility is around \$90 dollars per ton, some municipalities are paying. We anticipate that may be increasing. When you compare that to the tip fee for organics at Quantum Biopower in Southington, the only commercial AD facility we have to date, it's around \$40 dollars per ton. So -- And think to this point, that 30% of the tonnage that we're sending for disposal in the state is food scraps and yard waste.

REP. MESKERS (150TH): Right.

MS. DYKES: And that 30% exceeds the total capacity -- this total tonnage that the MIRA facility is handling today. So --

REP. MESKERS (150TH): And our -- And our business model is private collection, but the town ultimately is paying for -- from transport out. So I think we may have a business model that facilitates the negotiation.

MS. DYKES: Yeah. I do hope that you'll be happy to share the -- You know, it's great -- It's always great to have good partnerships with legislators and with the municipal leaders on these issues. Our Organics Infrastructure kickoff meeting on February 26th is intended to try to bring these different pieces of the puzzle together. We know that DEEP has run procurements for anaerobic digestion in years past. We've -- we haven't succeeded, even when extending a Power Purchase Agreement to awarding those to a facility. It doesn't necessarily mean that they're getting financed and getting built. And that's because the other part of revenue stream that they need certainty about is, where's the feedstock? Where's the -- Where's the organic material going to come from?

So one of the themes of this kickoff meeting is to look at, could we run a combined RFP with municipalities putting out to bid for collection programs, right? Together with the Power Purchase Agreement opportunity. And I think that that may be powerful to help get these projects out off of the planning stage. And we have several that have already been permitted in the state, actually, but just, they haven't gotten financed 'cause they need that certainty on the energy with the gas price and on where their waste will come from. So -- [crosstalk] I can talk about this all day, but we'll look forward to [laughs] talking with you more on it.

REP. MESKERS (150TH): I'll just finish with that if one on your team could reach out to me tomorrow, being a Friday, and see if we can have an initial conversation. I'll try to kickstart it. Thank you.

MS. DYKES: Will do.

REP. ARCONTI (109TH): Representative Steinberg, did you want to -- did you have any questions 'cause I saw your hand up before. Then, Senator Needleman?

SENATOR NEEDLEMAN (33RD): Thank you, Representative Arconti. And thank you, Commissioner, Deputy Commissioner Julia, really appreciate your time. Obviously, there'll be a lot to talk about on some of these bills, after. And I do want to say that first on the trash idea, within DEEP, obviously, you know, there's a lot of pressure to improve the process for approving anaerobic digesters, that has to happen. I think that Senator Osten testified and had other conversations about, why does it take 18 months in Connecticut when it takes two weeks for farm-based digesters for the garbage problem to be resolved? If it can be, and I hope it can be. We're gonna need to improve that process and figure out logistically where they belong so that the trash doesn't have to travel that far.

I will tell you that, happily my town is doing an experimental program also, and we're publicizing and encouraging our residents to bring their food waste to our transfer station. And we will see what kind of response we get. I'm hopeful that people who want to do this will. And as you know, we're -- we have a decade-long process here of re-educating the public, you know, with more focus on reducing solid waste as much as possible. And then utilizing as much of it for other sources as we can. I think that's gonna include more consideration to single-stream recycling, which I think has not worked out that well. But a longer conversation. I do applaud the effort, I do believe that whether you get 10, 20, or 30 percent of the trash out of the system, and we use it to generate biogas. That helps in a lot of ways because we are limited in our pipeline to get gas and as we see, however, we build our grid for 2040, I think gas is gonna be part of it. And I think the more biogas that's in there, the better

off we're going to be as a state. I don't have a sense from you, and I don't know if you have a sense of -- if the system was currently unoptimized, what do you think the rate would be -- the value of that energy? I mean, do you have any sense of it?

MS. DYKES: For the anaerobic digestion?

SENATOR NEEDLEMAN (33RD): Yeah.

MS. DYKES: It's -- I don't think I could -- I don't know. I don't want to -- I will say that DEEP did the RFP a couple of years ago, and the pricing is above the wholesale market price, of course. I think the pricing was a little bit vary -- there's quite a bit of variation among the prices that were bid in by the different projects. So it suggested to me that, you know, I think developers are -- need to have more certainty around the revenue they'll get from tip in order to efficiently price their PPA bids, for example. So, and I imagine that this has probably changed, you know, quite a bit since that RFP, just because wholesale prices have come down as well. So there's more to make up in the market. So I wouldn't -- I wouldn't want to venture an estimate. But yeah --

SENATOR NEEDLEMAN (33RD): Okay. Yeah. I'm just wondering at scale, if we optimize this, which is obviously a process that will take some incentivizing. If we optimize it and we get to the other side of this where we're pulling out as much as is practically possible and using it to generate an energy, we should have a target numbers somewhere in mind. And maybe that is something we should think about and study.

Other thing is, you know, a couple of years ago I was a hard one to convince on the energy efficiency standards, because I think they're hard to actually implement when you combine any product from anywhere in the world and pay no extra freight, like just ordering it through Amazon. But I do believe that

one of the myths -- not a myth, but the fact is, even though our rates are overall in the very top tier nationally, the energy efficiency standards that the State has implemented, from light bulbs on down, has brought us into the middle of the pack of actually, what it costs to run your home or your business. They're not -- Energy efficiency matters in terms of overall cost, you know. If we look at just absolute rate, that's one number, but it was a bit of an education for me to understand how some of our initiatives, some of our public policy stuff is impacted by having the other hand of it, which is continually improving our energy efficiency standards.

So I'm on board with it, obviously. There'll be a lot of work to go through, line-by-line, what's in there, especially on the commercial side where payback is important. But I also want to highlight on the consumer side by eliminating the least efficient products as a conversation, we had before. We're going to put only more expensive products into the marketplace, typically on electrical appliances. The least efficient costs the least. And that -- By eliminating that here, we're going to put a burden on the low-income folks, and the people who rent, you know, the landlords. There's gonna be pressure on them, because those are the typical entry-level products for low-income people. They don't necessarily calculate out that amortized over five years, this is going to be cheaper. It's a -- it's a barrier to entry.

So I think that with this, as we do with light bulbs, we need to really incentivize the more efficient products, and take into account the impact on lower-income people that this will have.

So, other than that, as always, it's an enlightening educational experience to have you guys testify. And I appreciate your time.

MS. DYKES: Well, thank you, Senator. And I'll say we have appreciated all the dialogue that we've had with you on this -- on the Appliance Standard Bill over the last session or two. And I think that it's strengthened as a result of that dialogue. And I do hope and appreciate that -- you know, the opportunity for support for this year. I think that I do want to underscore, while some of -- some of the products, the more efficient products have a higher upfront cost. You know, they're all cost-competitive with the non-compliant products, and most have a payback period less than one year, and many of them have no incremental cost at all.

So furthermore, low-income customers, you know, the average residential bill maybe \$3,600 dollars, \$3,300 dollars per year. And for low-income customers, they're spending 20, 30 percent of their monthly on energy. So, for those customers, this can have, you know, more impact -- even more impact than most, in helping, you know, avoid other affordability challenges by minimizing their -- you know, their energy -- the percent of their income going to energy each year. So, I think that there's a lot to recommend here.

The other thing I'll note that, through the Conservation & Load Management program, we also do provide for some buy-downs on the sticker price for efficient products. I think many people may not know that, that when you're at the hardware store, and you're buying a LED light bulb, our lighting program, in some cases, is providing for a point-of-sale price reduction through the Energy Efficiency Program, that helps people overcome some of that sticker shock when they're comparing to an incandescent or to a CFL.

So those opportunities are also available for us to -- again, lock-in, like I said, we do -- we do a lot of -- we implement a lot of different policies. It's hard to find one that saves people more money than this does, so -- But always glad for the



dialogue. And I think it has strengthened our proposal, the work that we've done with you on this. So look forward to working on it again this year.

SENATOR NEEDLEMAN (33RD): I always appreciate it. And I think that the complexity of what we're trying to do here, everybody wants simple answers, but in the end, energy would be hard enough to manage in terms of reliability and resilience. As we see down in Texas, they have had a nightmare, and they're blaming it on renewables, when it's not. Those windmills were not set to run in below-freezing temperatures. I think that we're gonna all have to have a conversation [inaudible] --And I talked about maybe doing an updated all-weather, all-incident type resiliency study to make sure that we're not forgetting anything 'cause climate change, the ability to have sort of half the country with power problems right now, should be a wakeup call to all of us that reliability, resiliency, costs, and transitioning to more renewables, all have to work together.

And that last component, the transitioning our whole grid, our whole way of life, I mean, Bill Gates has been talking about it now with his new book, is gonna be an enormous human project. I mean, maybe the largest scale thing we've ever done as a -- as a planet and we need to be on-board with it. I like that Connecticut leads. I just want to make sure Connecticut stays competitive as it leads. So, we're on-board, but we've got to do it smartly, and make sure that our people are not in the dark, in the middle of the winter with no heat. Thank you.

REP. ARCONTI (109TH): All right. We had two more hands come up. Representative Steinberg, followed by Representative Ferraro.

REP. STEINBERG (136TH): Good morning, Commissioner. Good to see you. Thank you for your testimony today. I'd just like to focus on 862, I believe it is. It seeks to impose further oversight over solar

installations. My question is this; I thought we passed some legislation a few years ago that put greater restrictions on some of this. And I'm wondering, is there some pattern of abuse that's leading us to believe that we need to impose a number of additional restrictions on the solar installation industry that is already hurting, thanks to the pandemic. Why all of a sudden are we suddenly seeing the need to be even more restrictive, particularly on the small ZREC program?

MS. DYKES: I think that this proposal actually will benefit the solar developers and the renewable industry by just making clear, consistent rules that everyone can compete around. You know, that's the benefit of all of our approaches to distributed generation is developing open competitive processes. The LREC, ZREC program, for example, includes specific categories to reflect a priority on ensuring that systems of different sizes -- We want to have systems of different sizes that are developed. And the auctions are run to allow for a higher price or subsidy to be paid for smaller systems, recognizing that they have -- they struggle in terms of -- They don't have the same kind of access to economies of scale that a large project would, right? Those are kind of the inherent bedrock kind of design preferences that are within the LREC, ZREC program.

But what this bill -- What's happened is that, just there -- it's been -- There's a lack of clarity perhaps in the rules around the sizing of systems, has enabled developers to take a large project and bid it in chunks, okay? Into the auction for a size class that the whole project would not be eligible for. And so you've got a large project capturing the space in a small -- in an auction designed for small projects, which is not what was intended. So when we -- would -- you know, this statute will make that clear, just tighten up that -- those rules around to prevent this gaming, and I think that that

will perhaps be a relief to developers, to just have some clarity around what to bid around.

We know that there's also concerns with respect to the environmental impacts and citing impacts of larger projects, you know, and that's another piece of this Bill. We have some who have called for a moratorium on solar projects because of concerns around environmental impacts. So, I think that's another insight that we have. We've included some positive environmental siting requirements in our grid-scale renewable RFPs and the opportunity to work with utilities on incorporating those types of considerations into the LREC, ZREC program, would be a positive.

There's a significant portion of projects that clear and get a contract through the LREC, ZREC project -- program that do not successfully reach commercial operation. And some of that may be because site characteristics that become challenging in terms of permitting or siting, and what have you. So, you know, I think that these are all things that are destined to provide clear rules that everyone can compete around. Ensure that small projects can compete in the space that's -- that's established for them, and to ensure that we have projects that can be deployed and actually every -- what we award does get built because we've minimized conflicts between our natural resource needs and our de-carbonization and renewable deployment goals.

REP. STEINBERG (136TH): Thank you for that explanation. That has been much more encouraged than my cursory initial reading of the legislation. I hope the industry is equally supportive based upon your interpretation. Thank you for your testimony today, Commissioner.

REP. ARCONTI (109TH): Representative Ferraro.

REP. FERRARO (117TH): Thank you, Mr. Chair, and thank you, Commissioner, for your testimony. I want

to piggyback a little bit on Senator Needleman's comments regarding the tragedy that has taken place down south in Texas. I have -- actually have two karate schools in that area that are run by students of mine. And one of them is in New Braunfels, which experiences normally temperatures north of a 100 degrees in the summer. And for two days straight, they've been undergoing more snow than they've seen in a decade. And, of course, the commentary is that, the turbine -- the wind turbines have frozen, and are not able to generate electricity. And many of these folks are now without heat in their homes. My concern was, our large procurement of wind recently. And the temperatures here in the North are more commonly cold, colder than New Braunfels, Texas. And I don't know what the specs are with regards to the turbines we will be using to generate to win. But what did come to mind when I thought about it was, we've been talking an awful lot about battery storage, and I really think that this is a wakeup call, and storage was originally contemplated as a means to store energy at lower costs or at peak hours, and what have you.

But now, I'm beginning to see it as an emergency backup, in case something like this happens, as we move to a 100 percent renewable grid without the use of fossil fuels. I am -- I see this as an area that we need to provide for going forward. Is this something you've thought about or have any contingency plans for?

MS. DYKES: Well, thank you for that, Representative. And first, when you describe this as a tragedy, I think that is, you know, the first and foremost thing in my -- in my thoughts, I know -- You know, we know how important reliable electricity is. Not just for, you know, convenience, but for public safety and preserving human life and human health. And our, you know, hearts really break for the -- the folks in Texas and in the Midwest who are struggling with multiple days in these terrible adverse conditions without

power. So I hope that your -- your students are okay. And I'll say that this is a wake-up call. I think, you know, there's a lot of kind of debating questions going on about what the root cause is. I think some of the reporting attributing this to renewables non-performing, overlooks the significant number of gigawatts of natural gas generation that is -- that is not running that far exceeds the amount of renewables that are -- that are offline at this time.

But I think the most important is, that it's really premature for us to, you know, kind of look or diagnose exactly what's going on with the generation supply. I know that NERC and FERC have announced, they're going to be doing an investigation into, you know, these -- the reliability standards and implications. And we'll be following that closely to ensure that ICE New England and RTO is actively inadequately planning, on not based on past historical projections, but on future projections of climate impacts and more extreme weather to be able to provide for a reliable grid. With your, you know -- And I think that that includes the renewable generation and all generations that we're procuring on this state. We're certainly no strangers to the challenges of not -- you know, gas units not being able to get gas and run during periods of extreme, cold winter weather.

But the one root cause that it is -- that is very evident of all of this is that the jet stream has collapsed. And this is something that scientists -- scientists have told us would -- would happen with continued emissions of greenhouse gases into the atmosphere. And it is scary, frankly, to see these patterns occurring, and occurring so soon in this century. So, I think it underscores that we need to make sure our grid operator is prepared, and that we are making prudent investments that take in extreme weather into account.

You know, here in Connecticut, during Superstorm Sandy, we came within 15 minutes. If the wind direction had shifted 15 minutes later, we would have lost substations in Bridgeport, that would have been under water. And thankfully, from that experience, UI has invested in moving and raising up many of those coastal substations. That's an example of the type of preparedness and risk assessment that needs to occur to protect -- protect, you know, businesses and families here in our State.

But most importantly, the -- you know, those things are coming with a cost. The most cost-effective thing we can do to protect against more catastrophic impacts of extreme weather is to invest in strategies that reduce emissions. You know, yesterday, I had the opportunity to join the Governor and talking about the transportation climate initiative, which -- which is one that we think will cost-effectively help reduce emissions. But, you know, there's a lot. But first, we start with, you know, hoping and praying for the folks in Texas, that they get their power back on soon. And then looking forward to participating in those processes where we can learn what more -- what we can do better because we have to be prepared.

REP. FERRARO (117TH): Thank you, Commissioner. I appreciate your comments. And I understand what you're saying with regards to lowering emissions and -- and the impact on the environment. But my concern is -- is that, I think that we should really consider increasing the priority of battery storage for -- for emergency use because regardless of how much we lower emissions, we're not going to be able to escape the elements of the weather. And we're gonna find ourselves, here in the Northeast, probably confronting a similar situation, if we don't have a backup battery storage of sufficient amount. And I am concerned about being able to actually provide a sufficient amount of backup. But I do think that we need to prioritize that and look

into possibilities of expanding our procurement of that.

MS. DYKES: And I will say, we're just very delighted by the progress that PURA has been making in their docket, on looking at distributed storage. I think it sets out a really ambitious program for the State, so. But I'm -- You know, I share your -- your interest in -- in looking at those types of resources that can operate both to help us reduce emissions, but also to provide for resilience and reliability for customers here in our State.

REP. FERRARO (117TH): Thank you, Commissioner.

REP. ARCONTI (109TH): Representative Cheeseman.

REP. CHEESEMAN (37TH): Thank you, Mr. Chairman. Thank you for jumping in late, and -- as all of us roaming virtually between different Public Hearings. So, thank you. It's wonderful to see you, Commissioner. Just a couple of things piggybacking on Senator Needleman's comments, and, you know, this is one of my pet bugbears. As we move forward with energy efficiency, with the transportation climate initiative, with all these things, I think we always have to be cognizant and concerned about the effect this is going to have on our residents in terms of the affordability of their overall energy, whether it's electricity, whether it's their cars, whatever that -- Yeah, and, you know, I -- I know you share this concern and that we will -- we will craft a way forward that takes this into account.

Secondly, I know one of the things that we have, and I understand you have a concern over this that they don't have in Texas, is a forward capacity market. And you've indicated, you know, we're paying for resources that we don't use, particularly in terms of, you know -- But we have our renewables, but we're also paying for these backup facilities. So I'd just like you to weigh in on that, because it appears to me in some ways -- you know, it's like,

the Take Back the Grid Act, we indicated Eversource should have on staff, the people to do those immediate repairs, but that comes with a cost. Obviously, having that forward capacity market where, you know, you bought that generation capacity to be there just in case. And Texas is probably hoping that -- wishing they had something like that in place. So, if you could just weigh in on that. I know that's not strictly what we're talking about today, but as we have the benefit of you today.

MS. DYKES: [Laughs] Well, I do want to say, I think that there have -- you know, there have been a lot of debates about this just, you know, in the press. It's over the last two, three days, as folks have been reacting to this tragedy in Texas. I think that -- I do think that it's -- I'm always interested to talk about the challenges that I see in the -- in the shortcomings of the capacity market construct that we have in New England. But I do want to be careful to say that I think it's premature for us to -- for me to kind of point to any -- you know, what the causes of Texas's concerns are, and whether -- what that means? You know, what -- to what extent their market design is a contributor to that.

So I just want to be careful to say, I think -- I think, we've had a lot of concerns with our capacity market here in ICE New England. I can't really opine on -- I don't want to really opine on whether that is a contributor -- the lack of a capacity market in Texas is a contributor to their -- to their challenges. But some of the concerns that we've had about this capacity market here in New England specifically relate to, you know, not only the fact that the capacity market has this erected barrier to clean energy resources that this state -- that our state is procuring, being able to be counted and credited in that capacity market.

But -- But also that the products that's being procured through the capacity market, in some cases,



I think, is not serving Connecticut ratepayers well in terms of providing for liability. Particularly, when our capacity market is procuring large -- you know, is really structured around the investment needs of natural gas resources and has contributed to our grid becoming very gas-dependent. But, knowing that, in periods of prolonged cold weather, that many of those gas resources aren't able to access pipeline gas and run reliably. So that's a reliability challenge, I think, in our capacity market design.

At the same time, this capacity market construct, you know, is not properly incenting resources that we need to maintain reliability, like our nuclear -- our baseload nuclear resources. That also is clearly evident. Although the ISO determined that, those resources are critical for preventing rolling blackouts, or brownouts. Connecticut had to step in to prevent the Millstone facility from prematurely retiring. And I think that that's another symptom of our capacity construct here in New England not functioning correctly to meet our goal of reliable and affordable, and clean energy.

REP. CHEESEMAN (37TH): Thank you. Very eloquently and diplomatically answered. And I show no more questions, but as I have you here, and I have the Chairs here, I would love to have you come in and talk to us about the Integrated Resources Plan, to have a really full discussion. I don't know if this is on the docket, but now -- As I say, I have a captive audience, so I'm planting the seeds, so. All right. Thank you very much, Commissioner. Thank you, Chairman Arconti.

REP. ARCONTI (109TH): Thank you, Representative. And I did had the idea, Representative Cheeseman, you know, once we get through the day of deadline and we have that little, you know, week or two-week lull in between committee work and section work, that maybe we could ask DEEP to come in to give a presentation on the IRP. And also the Nesco Vision

Statement, and what's been happening with Commissioner Dykes' work with counterparts in other states with the ISO New England, and the various markets. I haven't said that to the Commissioner yet, so I hope she is open to that idea.

REP. CHEESEMAN (37TH): See, I've offered you the opening, Chairman Arconti.

MS. DYKES: I think it would be a -- I think it would be a wonderful opportunity. We appreciate the invitation. I think it's also very timely. We are -- We're wrapping up our comment period on the draft IRP, so it'll be great to have this opportunity for dialogue on that document.

Also, with respect to the vision statement process we've launched with the New England states, I'll note that, FERC, just as we've been -- have -- As you've been holding this hearing this morning, FERC has announced that they are going to be holding a series of technical conferences in -- starting next month, to look at capacity market constructs and exploring market designs, including for PJM and ISO. So, it's very timely. [crosstalk]

REP. ARCONTI (109TH): Great. Great. So that concludes this question from Committee Members, so the DEEP team is free to go. Thanks for coming before us today and testifying.

MS. DYKES: Thank you so much for the opportunity.

REP. ARCONTI (109TH): Thanks. So we're gonna move on next to Chair Gillett of PURA and her team, I think, Karl Baker. And then, after PURA, we are gonna move to the public portion because we are past the first hour. So we'll go back and forth between the public and public officials. So after PURA, will be Don Shubert from the Connecticut Construction Industries Association.

MS. GILLETT: Thank you, Chair Arconti. Good afternoon Chairs, Ranking Members, and Committee Members. As Chair Arconti mentioned, my name is Marissa Gillett. I am the Chairman of the Public Utilities Regulatory Authority, and I'm joined today by a member of my staff who I will introduce in just a moment. The focus of my testimony today is with respect to raise Senate Bill 858. We also provided written testimony on the Bills HB 6409, SB 857, SB 864, and HB 6415, that a -- two of those written testimonies with respect to 6415 and 6409, we offered some amendments for the Committee's consideration. And besides that, the testimony was meant as informational, and we hope that it assists the committee in your deliberations.

So, getting back to Senate Bill 858, which is the act concerning Call Before You Dig program violations, and certain modifications to the gas pipeline processes. At first want to note that, today I am joined by Karl Baker, who is the long-time supervisor of PURA's Gas Pipeline Safety Unit. So, I will largely defer to him for any questions that you may have about this bill. If it looks familiar to you, it's because these concepts have received a public hearing in the Legislative Session for 2020, as well as in 2019, where it was passed out of Committee, and I think we ran out of time to get a vote on it.

But the concepts within the Bill, which has been -- the two concepts have been combined into SB 858 for your consideration this year, since they both refer to public safety improvements that we -- enhancements to those two areas that we think will greatly improve public safety. And -- And we are happy to walk through them. We have walked through the enhancements in our written testimony and, you know, they include modifications to the gas pipeline over process -- oversight process that we have today that -- that seek to clarify that PURA has the same enforcement capabilities of our municipal systems

and propane operators, that we exercise over the gas utilities today.

And to be clear, we have existing jurisdiction in gas pipeline safety over municipal systems and propane. But I think there are areas of the statute that could be enhanced to mirror jurisdiction across the Board. So, I -- that's all I have for you today. We want to thank you for raising Senate Bill 858. Greatly look forward to answering your questions today and working with the Committee throughout this session. So, open to questions.

REP. ARCONTI (109TH): Thank you. Thank you, Chair. I don't have any questions on the -- on the Bill. I know, as you said, we were able to JF it out of Committee in 2019. It did pass the Senate, but we ran out of time in the House in 2019 to get this Bill called and voted on. And then, everyone knows what happened in 2020. But the -- I missed from my notes, you mentioned earlier, you had some amendments and testimony for other bills. What -- Could you say those bills again?

MS. GILLETT: Sure. I apologize. I went through that quickly. We offered informational testimony on SB 857, which addressed the backup provisions for cell towers. We also offered informational testimony on SB 864, which addressed the municipal purchase of poles and substations. And then, we submitted some requested amendments to HB 6415, which dealt with the natural barrier preservation. As well as some amendments to HB 6409, which -- which you were discussing with Commissioner Dykes just a few minutes ago. So, we provided that testimony to your Clerk, but I'm happy to walk through the amendments. We -- They're fairly succinct amendments, and I'm happy to do that today, if that would be helpful.

REP. ARCONTI (109TH): No, that's okay. I just wanted to make notes of it, so I could go back and review, and then we can touch base later on it. So

other than -- I have no questions on anything looking through. I don't see anybody's hand raised at the moment. I'll give everyone a minute or two, if -- Rep. Ferraro? Yes? No?

REP. FERRARO (117TH): Yes. Thank you.

REP. ARCONTI (109TH): Yes. Okay.

REP. FERRARO (117TH): Thank you, Mr. Commissioner. We gave Commissioner of PURA an opportunity to speak, on the effects of decoupling. I'm just wondering if Commissioner Gillett would have any comments regarding that Bill?

MS. GILLETT: Thank you for the question, Representative Ferraro. I think, you know, PURA is embedded in DEEP, and I think we heard Commissioner Dykes say that she's speaking on behalf of the administration. And I would respectfully defer to her position on this bill -- the Administration's position on this Bill.

REP. FERRARO (117TH): Specifically, I guess, I should ask. I understand the Administration's position, and Commissioner Dykes was very articulate with that. But the question was raised, is there any benefit to the consumer, to the decoupling of these two agencies that you -- that you could foresee, without having your own personal opinion? Just a -- You know, from a 30-foot, 1,000-foot level, do you see any advantages to it? And I don't mean to put you on the spot. I'm just curious.

MS. GILLETT: No, I appreciate it. I appreciate the question. May ask for clarification whether you mean from a budget perspective or from a policy perspective? Because I defer to the Administration on the organization of the Executive Branch.

REP. FERRARO (117TH): Yeah. I'm concerned with policy, yes.

MS. GILLET: I think Commissioner Dykes articulated that -- and she's accurate, that PURA is bound by the Uniform Administrative Procedures Act. And I strive to maintain our agency -- I strive to maintain PURA's independence in all of our decision-making. So I'd like to think that that would be the status quo under any organization. So, so, I don't see that being impacted one way or the other, PURA's decoupled.

REP. FERRARO (117TH): Okay. Well, I'm sorry I put you on the spot like that. But I'm just trying to -- there's a lot of -- an awful lot of interest in decoupling the two agencies, and if we're going to move forward with the plan that was outlined in our screening meetings, I think there needs to be some idea as to what the benefit is gonna be from a consumer point of view, from a policy point of view, a budgetary point of view, et cetera. And I don't -- To be honest with you, quite frankly, I don't see the answers as forthcoming as I would like them to be. But thank you very much.

REP. ARCONTI (109TH): Thanks, Representative. Senator Needleman.

SENATOR NEEDLEMAN (33RD): Thank you, Chairman Gillette, very nice to see you. Always appreciate your testimony, and I'm not gonna put you on the spot. I -- I -- I'm hoping that we can move some of this stuff forward this year. That's all I wanted to say is, in my opinion, you've done a tremendous job for the state of Connecticut. We're relying on you to make sure that we're never in Texas's position. And -- And again, the whole issue of resiliency and reliability under all weather conditions is something that I think we need to have a much deeper conversation about because the unthinkable has become thinkable. And we should be thinking about the unthinkable because I'm -- I'm more concerned than before about the idea of everything being electric, right? Because then we're really relying on one power source to do everything.

And we know from hackers out there, if we're totally relying on that and all of our heat, all of our transportation, everything we do relies on electricity, if that system goes down, we have a big problem, whether it's related to weather or other circumstances. So, I think the Legislature, the Governor, the Commission, and PURA need to really have a heart-to-heart talk about what we need to do to make sure that -- It's in the focus right now, and I'm more than concerned that we're not as prepared as we need to be. And I know the next 10 years are gonna move us into an even more risky position if we're not careful, so. So, we're relying on you to make sure that we're safe. Thank you.

MS. GILLETT: Thank you, Senator.

REP. ARCONTI (109TH): No pressure. Yeah, I will give a quick plug for the grid modernization docket, you know, while I have the chance. A lot of the work that we've -- you know, we've talked about already today with Commissioner Dykes, and some of the questioning that Representative Ferraro had around storage for the Commissioner. You know, Chair Gillett and her team over at PURA are undertaking a lot of that work. So I always put a - - I always want to put a plug in for that, for Committee Members to take a look at all the REO, the reopeners, and all the various, you know, sub-dockets within the grid docket.

I know there's a storage one, and there's many others I know will be taken up some storage legislation. Or a section of a bill will include some storage proposals at a later public hearing. So I always wanted to give that quick plug for the grid mod docket and all the great work that's going on over there. Seeing no other hands raised. All right, that concludes the PURA section. So thank you, Chair Gillett.

MS. GILLETT: Thank you for having me.

REP. ARCONTI (109TH): So we'll move on to the first person in the public, Don Shubert. And then, after Don will be Representative Chris Rosario.

MR. SHUBERT: Good afternoon Chairs, Vice-Chairs, Ranking Members, Members of the Committee. My name is Don Shubert. I'm the President of the Connecticut Construction Industries Association. I'm testifying today in support of Sections 11 and 12 of raised Bill No. 858, an Act concerning the Call Before You Dig violations, and certain modifications to the gas pipeline processes. The Connecticut Construction Industries Association is a very broad-based group of construction industry associations. And many of our members operate under the Call Before You Dig statutes and regulations every day. And we're testifying in support of Sections 11 and 12, primarily because safety is a priority in our industry.

These two provisions would give the officials at PURA overseeing gas pipeline work, and the Call Before You Dig regulations a very important way to address immediate hazards and dangerous situations on jobs. Without these provisions, if they run into a dangerous or hazardous situation, they have to go through a pretty cumbersome process to contact their Commissioner and get approval and everything else before they can react to the situation, which basically impedes their ability to address harmful situations in any timely manner.

Again, you know, we support these provisions, especially Section 12. I can tell you that a group of very experienced industry representatives worked very well with some officials at PURA in designing this language and agreeing to this language. It's pretty much been vetted by industry professionals and the peer officials at the same time. We worked very well with them. We think we came to some good language, and we would just encourage the Committee



to vote for Sections 11 and 12 of this Bill. Thank you for this opportunity to testify today. I would be happy to answer any questions if I can.

REP. ARCONTI (109TH): Thank you. Thank you, Don, for testifying today. Are there any questions from Committee Members? Representative Foster.

REP. FOSTER (57TH): I just want to ask for clarification, since you're so specific about the segments of the Bill that you're supporting. Is there a particular other language that you're concerned about?

MR. SHUBERT: The other sections of the Bill, Representative, are not in our bailiwick. We're contractors. This deals directly with our safety and the safety of other contractors and the general public around our projects. So this is -- this is our area of expertise, and we thought it was very important for us to let the Committee know how concerned we are about it and how important this is.

REP. FOSTER (57TH): So your specificity was related to scope of practice, not concern, so.

MR. SHUBERT: I'm sorry. I didn't understand your question.

REP. FOSTER (57TH): Oh, so you're -- I just -- I just wanted to clarify that your -- your specificity was because you were just remaining in your scope of practice, not because there was a concern, you were asking us?

MR. SHUBERT: That's correct. Yes.

REP. FOSTER (57TH): Thank you.

MR. SHUBERT: You're welcome.

REP. ARCONTI (109TH): All right. Thank you, Representative. Seeing no other hands raised. That concludes Don. Well, thanks, Don.

MR. SHUBERT: Thank you very much, Mr. Chairman. Thanks for this opportunity.

REP. ARCONTI (109TH): Okay. Back to the public official lists. We're gonna go, Representative Rosario. And I think Representative Felipe wants to go with Representative Rosario.

REP. ROSARIO (128TH): Hi.

REP. ARCONTI (109TH): Hey, Chris, trying to manage texts and everything.

REP. ROSARIO (128TH): How're you guys doing?

REP. ARCONTI (109TH): Good. How're you doing?

REP. ROSARIO (128TH): Good. Thank you.

REP. ARCONTI (109TH): I'm not sure if Antonio wanted to join you here. If we can just -- we can call on him later.

REP. FELIPE (130TH): Oh, whatever works best.

REP. ARCONTI (109TH): Oh, there he is.

REP. FELIPE (130TH): Yeah. I'm right here.

REP. ARCONTI (109TH): All right. Why don't we kill two birds with one stone? So Representative Felipe and Rosario, the floor is yours, guys.

REP. ROSARIO (128TH): Sure. Good afternoon Members of the Committee, Chairman Arconti, Needleman, Ranking Members. My name is Christopher Rosario, the 128th District. And I'm here to testify on behalf of 64 -- HB 6413, AN ACT REQUIRING A STUDY OF MUNICIPAL ENERGY SECURITY AUTHORITY. I believe that

this is a home run. It provides good-paying jobs for people of color and communities that need it in the sustainability sector. I would like to take my time and defer it to Alfredo Castillo, Reverend Lord from [inaudible] defer my time to them because they're the true policy experts that can really --

REP. ARCONTI (109TH): Yup. You froze up there a little, Chris, on my iPad. But well can we -- Are they -- Are they in the webinar?

MR. GINN: I'm sorry. You were -- You were frozen for that. Could you please repeat, who you like to refer who you were talking to?

REP. ROSARIO (128TH): Sure. Councilman Alfredo Castillo, Chris Duffy, and Reverend Stanley Lord from the NAACP.

MR. GINN: I'm not seeing Alfredo Castillo in the attendees' room. But I have got Mr. Lord in --

REP. ROSARIO (128TH): Yeah. Mr. Lord, and Mr. Duffy. Yes.

REP. ARCONTI (109TH): All right. So, Mr. Lord. Feel free to offer your testimony anytime.

MR. CASTILLO: Can you hear me?

REP. ARCONTI (109TH): Yes, sir.

MR. CASTILLO: This is Alfredo Castillo, Councilman of the 136th in the City of Bridgeport.

REP. ARCONTI (109TH): Okay. Thank you, Councilman. Yup, the floor is yours.

MR. CASTILLO (136TH): All right. Thank you. So MESA, the Municipal Energy Security Authority. MESA on-site clean energy for neighborhoods, and cities. MESA delivers on-site clean energy, security, scalable for one house to thousands. MESA invest

and install microgrids for uninterrupted supplies of on-site energy at an affordable price, made assessable at all times, including severe weather. MESA by design, purpose, and its execution is guided by the U.S. Department of Energy, and U.S. Interagency, principles for us National Energy Security with U.S. cities.

Microgrids are recognized by the U.S. DOE as a non-site energy security solution. Microgrids deliver scalable, affordable, resiliency, and secure supply of local on-site energy, while reducing the carbon risk associated in traditional fuel types. Microgrids reduce local dependency on carbon fuel types, while affording the partition infrastructure support.

Public-private partnership and local investment. Microgrids are the solution to secure local, scalable, affordable resiliency, energy for neighborhoods, cities, and their population. To this purpose, MESA, Municipal Energy Security Authority, has been organized as a national non-profit with a mission statement -- Sorry. Mission statement to attract private financing coupled with public grants to be invested in workforce development. Workforce development is necessary to provide infrastructure. Workforce scales for local unemployment hires source from deserving, but underserved population. For this purpose, finally MESA by design, purpose, and execution aligns itself exclusively within policy guidance supported by the U.S. National Security Objectives for domestic clean energy within local municipalities guided by the work currently being done by the U.S. Department of Energy, and cooperating U.S. Interagency partners. So that's my statement. This is my statement on MESA.

REP. ARCONTI (109TH): Thank you, Councilman. Chris, are there any -- Representative Rosario, any other your constituents wanted to make a remark on?

REP. ROSARIO (128TH): I'm not sure if Reverend Lord is on.

REV. LORD: Yeah. I'm on.

REP. ARCONTI (109TH): Hey, Reverend.

REV. LORD: Good afternoon at this point.

REP. ARCONTI (109TH): Good afternoon. The floor is yours.

REV. LORD: Thank you, Chair. I represent the Greater Bridgeport NAACP, and we are -- have partnered with MESA to join with our national campaign, also State campaign with the 100 Million Jobs campaign. Through MESA -- MESA will offer at starting 30 jobs to those who were previously incarcerated. And through that program, we will be able to offer them good-paying jobs. They'll be trained as rangers to install renewable energy, the windmills. And so we, as NAACP, support this mission to be able to offer jobs to those who were previously incarcerated. As we all know, one of the biggest stumbling blocks for those who are returning citizens is finding a good-paying job.

So this program is essential for this area of Connecticut to be able to offer a program where they will be sustaining, be able to provide good meals for their families, be able to sustain themselves, and also be productive citizens. Not only that we have partnered with them also be able to [crosstalk] -- to be able to different types of programs to the employees that will be joining the program, whatever their services might be needing, whether it's mental support, family support, transportation, whatever is needed to help them become productive citizens.

So this will be a pilot program that we would start in Bridgeport, and then hopefully transplant it to another area -- each of our other areas, whether it be Waterbury, New Haven, Hartford, those types of

barriers in order to help our citizens. So, yes, we definitely support this Bill to bring these types of jobs to returning citizens. I thank you for your time.

REP. ARCONTI (109TH): Thank you. Thank you, Reverend. And I sure hope Danbury could -- the City of Danbury could be part of that, too.

REV. LORD: Oh yeah. We want to start -- We're gonna start in Bridgeport, and we're gonna expand it, as it grows. So yes, Danbury will be.

REP. ARCONTI (109TH): Thank you. Thank you.

REV. LORD: All of our level inner-city areas.

REP. ARCONTI (109TH): Representative --

REP. ROSARIO (128TH): Mr. Chairman, I'd like to kick it over to Rep. Felipe, if I can.

REP. ARCONTI (109TH): Yes. Representative Felipe.

REP. FELIPE (130TH): Thank you. Good afternoon, Representative Arconti, Senator Needleman, Ranking Members and the rest of my esteemed colleagues on the Energy and Technology Committee. I'm testifying also on House Bill 5256. And it is no secret that Connecticut has been a leader in clean, efficient and affordable energy. It's also no secret that Bridgeport, which we represent, has been at the forefront in that regard. Due to a bill that passed through this committee in 2019, we are embarking on a new wind power venture in conjunction with Bayer Wind. We have established partnerships with companies like New Power to establish fuel cells around our city, specifically on our West end and East end. And we have also had success with a microgrid initiative, similar to the Bill in front of you today.

I say this to express the many benefits of this proposal. This will also provide economic growth, bring jobs to our communities, provide energy cost relief to the residents, and increased security through the use of those microgrids. The jobs created by this legislation will employ people within the host communities. So in urban areas specifically, that would mean more people of color, as well as, students from our colleges, gaining employment.

We've long heard the talk about our state hemorrhaging college students post-graduation. Due to the work of this committee, among others, we have been able to identify employment for students and create opportunities for them to build families in Connecticut. This Bill can be another step in addressing that issue. The University of Bridgeport, which I am proud to represent, is one of the finest engineering schools on the East coast, and it would benefit us greatly to keep those professionals in the state of Connecticut, working to deliver clean, affordable energy to our residents. With that, I thank you. And I will give my time to Councilman Jorge Cruz of Bridgeport.

MR. CRUZ: Thank you. Thank you very much, Honorable State Representative Antonio Felipe, and Honorable Member, Representative Chris Rosario. And I want to say thank you to all the Honorable Members of this great Committee. My name is Jorge Cruz, City Councilman of the 131ST district. I'm coming to you live from my car 'cause I had to go out and do some runs, unfortunately, try to beat the snow. But, you know, one thing -- that the first thing I want to say is that, we had to keep the people of Texas in our prayers. It's unfortunate what has happened over there in Texas. And ironically, it really fits to what we're talking about over here, about the infrastructure.

I'm supporting this Bill for the sole reason that I worked with a lot of homeless population and a lot

of minority population here in the City of Bridgeport. I believe that this Bill will be a great benefit to -- to our men and women in the City of Bridgeport, and our men and women who are coming home from prison that we must set that -- set a welcoming mat to be able to help them with jobs and training and education. So I'm here to just basically support this Bill. And I want to thank you. And that this bill may pass, so we can all get to work and be united in this great State of Connecticut. Thank you very much to this Committee, Honorable Antonio Felipe, Honorable State Representative Christopher Rosario. Thank you.

REP. ARCONTI (109TH): Thank you, Councilman. So with that, I'll turn it over to any committee members that have questions. I see Representative Gresko has his hand up. Representative Gresko.

REP. GRESKO (121ST): Thank you, Mr. Chair. As referenced back in 2019, we were successful in passing the House Joint Resolution to create the MESA in Bridgeport. But this one, this Municipal Energy Security, can -- If Chris Duffy is there, how is this the next evolution of what we passed from 2019 to 2021?

MR. DUFFY: Thank you, Representative Gresko. This is Christy Duffy. How do you do panel and Chairman, thank you for allowing me to speak. Specific to MESA, we're excited in the City of Bridgeport to have the Bridgeport delegation today talk about a pilot called MESA Municipal Energy Security Authority, which has been a project that's been evolving over three to four years in the legislation. Though the actual effort of MESA started eight years ago with Alfredo Castillo and Chris Rosario, and Dennis Bradley. We were very successful, which Representative Joe Gresko to take a project that was in the lower east end of Bridgeport. And without public subsidy, without rebates or grants, we were able to reduce public



utilities by 65% in a -- in a carbon-neutral environment through a technology from the DOE.

This was a scalable result that was -- warranted the attention of the legislature. As Representative Gresko spoke, we were taking MESA to the 2019 legislation of Connecticut, and it was unanimously recognized. At the time, we didn't ask for resources, we're simply asking for recognition of MESA for scalable future purposes. Today, 2020, was a tough year. 2021 is our new year to bring out these evolutions of MESA. And we're seeking to have Municipal Energy Security Authority be brought forth by the Waterbury and Bridgeport leadership to make the historic step of creating workforce opportunity for the most under-served, but deserving of our population at these very troubled times, which we feel that the leadership in Bridgeport is capable, as is Waterbury, to lead the way. And if there's any questions, I'm sure I could defer that to Representative Gresko, who's been with this for five years.

REP. GRESKO (121ST): That works for me, Mr. Chair. Thank you.

REP. ARCONTI (109TH): Thank you, representative. I don't see anybody else's hand raised, I'll give it a minute. All right. Seeing none. Thank you, Representatives, and your team for testifying today.

REP. ROSARIO (128TH): Thank you. Thank you so much.

MR. CASTILLO: Thank you so much, Chairman.

REP. ARCONTI (109TH): All right, we'll go back to the public list. Katherine Fiedler from Save the Sound, and then Senator Hwang, and Representative Devlin, with their constituent [crosstalk] Stephanie Thomas will follow Katherine.

MS. FIEDLER: Hi, good afternoon. I missed -- I'm assuming this is beyond. I missed you calling out the order there. Is that correct?

REP. ARCONTI (109TH): You're good. Yup.

MS. FIEDLER: Okay, good. I don't want to cut someone off. Good afternoon, Co-Chairs Needleman and Arconti, Vice-Chairs Winfield and Allie-Brennan, Ranking Members Formica and Ferraro, and Members of the Energy and Technology Committee. My name is Kath Fiedler, I'm a staff attorney with Save the Sound. I'm here to testify in support of House Bill 6414, AN ACT REQUIRING THE STUDY OF THE USE OF TECHNOLOGY IN THE STATE.

The expanded use of technology can support the core function of the Department of Energy and Environmental Protection in protecting and improving environmental quality. The use of technology can allow for state-of-the-art monitoring that can support robust and fair enforcement, and the development of strong environmental policies and permit requirements that are most protective of the environment and public health. Technology can also be used to increase efficiency in an agency that will be resource-strained due to the upcoming 2022 retirement cliff and budget cuts. And technology can also be used to increase transparency in public education.

But I'll start with a few notes of caution. We will need to look for opportunities for efficiencies to overcome resource limitations that can fully support the Chart of the Department, and this will include expanded use of technology. However, while technology can support this, we must not see technology as a substitute for talented agency staff, and the institutional knowledge and relationships they bring to enforcement roles. There's an enormous benefit of having that experience in relationships being the kind of key trigger for enforcement rather than automated review

systems, or things like that. So we need to be careful when we look at resource allocation with new technologies.

Further, if technology is used to increase efficiencies, there must be a check to ensure that we continue to have positive environmental outcomes. Environmental compliance tracking should be incorporated into any policies and procedures that call for the implementation of technology related to compliance, monitoring, and enforcement.

Of course, there are huge opportunities as well. When we consider technology as e-governance and digital tools, these platforms must not only support the regulated community, but they must be tailored to the general public to provide transparency. This cannot be an afterthought, and that should be built into procedures and policies. We can't miss out on these opportunities, which will also in turn in efficiency with -- which will turn aid and efficiency as well. The general public must be considered as a user of any digital platform implemented so that the public can be empowered with information on the environmental and public health threats in their communities.

I wanted to highlight one system, in particular, that's -- that's critical to our work at Save the Sound. The Sewage Right to Know online system is a great example of this. And we're working with DEEP, and through legislation, this year, to expand the notification system to include real-time push notification so that the public receives prompt notification of sewage spills that pose environmental and public health threats. This expansion of the system wasn't considered in the latest hiring of a contractor for the online platform, so we are -- are delayed in that. And that kind of shows the importance of considering holistically the importance of transparency to the public, and the different digital tools that can be implemented.

And finally, it's important to examine how an expanded use of technology can be used to support and protect overburdened environmental justice communities from existing an additional environmental and public health impacts. Robust data connect support, and advocacy, and preventing additional pollution or reduce existing pollution burden. So any implementation of monitoring technology should be prioritized for these communities. Thanks for your time today.

REP. ARCONTI (109TH): Thank you. Thank you for your testimony. Any questions from Committee Members? See no hands raised. Thanks, Katherine. Senator Hwang and Representative Devlin.

REP. DEVLIN (134TH): Mr. Chairman, I think I'll kick this off just briefly. I want to thank you, and Senator Needleman, and Vice-Chairs Winfield and Allie-Brennan, and Ranking Members Formica and Ferraro for raising Bill 6415 for a public hearing. You know, we talk -- we've talked a lot environmental justice recently, and a lot of that is focused on writing wrongs of the past. And what this Bill is about, is writing wrongs of today. Where utility companies, and we saw this all summer with just, you know, horrible storm response, and I'm so proud of the work that PURA has done running roughshod over their neighbors. And to make this point -- I have submitted testimony. You can read it. But I want to yield my time to a constituent who has dealt with this firsthand, and that is Ms. Stephanie Johnson. So if we could promote her to be able to speak. And Stephanie, if you can turn on your camera and share with the Committee what you've experienced. And I think Senator Hwang will wrap things up.

REP. ARCONTI (109TH): Perfect.

MS. JOHNSON: Wait, I just got a note that said my microphone's not working. Can everybody hear me?

REP. ARCONTI (109TH): Yup. Your microphone is working. We don't see you, though.

MS. JOHNSON: I don't know how to do that.

REP. DEVLIN (134TH): At the bottom left, there should be a little video camera, and you could --

MS. JOHNSON: Oh, start video. Oh, I didn't know that meant that -- I was gonna record everybody or --  
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REP. ARCONTI (109TH): So, there you go. We see you now.

MS. JOHNSON: Sorry. Well, thank you very much for giving your time. And thank you very much to esteemed Members for listening to what we have to say. And I apologize if sounding emotional because this is a very emotional thing. Give me one second. Our property has been destroyed because of what UI and Eversource has come in and done. I've written something out, and I'm just -- I'm just gonna read it. And then if anybody has any questions, I'll be happy to answer them.

Again, thank you for this opportunity. My name is Stephanie Johnson with our then, one-year-old. We chose this house for a few reasons, the huge private backyard being one of them. Neither my husband, nor I grew up with a yard, and that's one thing we wanted our kids to have. We ended up having four within four years, so having a big private playground for them was wonderful. We knew the substation was there, and we were aware of our responsibility regarding the right-of-way and maintenance. We never inhibited or prohibited any work to be done until we heard that UI wanted to expand their substation by 40%.

We as direct abutters, were not initially notified, and come to find out the project had been in the

works for two years as UI was negotiating with GE to purchase psyllium that they needed to do it. From the start, we got the feeling that UI was being very sneaky and not following into proper protocols. Not all abutters were initially notified as according to, you know, the rules, and it was a big mess. So finally, they seemed to be friendly and willing to be good neighbors, but the more questions we asked and the more information we pushed for, it became clear that they had no interest in anything other than doing what they wanted to do, without any opposition.

Their blatant disregard for any -- and dismissal of our community was insulting. Their go-to excuse for not considering our desires and concerns was the cost and their budget. A company was multimillion-dollar bottom lines, and executives who make more for Christmas bonuses than most make in a year, is complaining about costs. Yet spared no expense on lawyers and useless visual aids. So after it all, we have to live with what we got, which was a fraction of what we started out with. And I do have some visual aids, and I did submit in testimony visual -- pictures of what our yard looked like in 2014, 2016, 2017, and what it looks like today.

So Eversource comes to us, then telling us in 2017, that they were clearing out all vegetation in the right-of-way from Milford to Norwalk. But they have it in their budget to give abutting properties additional plantings, to compensate for the screening that will be removed. Because of the rules of the right-of-way, we have to plant the trees on our side of the easement, causing us to forfeit use of about 4,000 square feet of our yard. But of course, not forfeiting the taxes on that 4,000 square feet of the yard.

There was an area of our property that we once had bocce court, we once had horseshoe courts, we have whistle ball -- whiffle ball tournaments back there. And with what their proposal is, we're not gonna be

able to enjoy those things anymore. I reached out in good faith to UI, asking them if they would give Eversource -- Eversource permission to plant the trees on their side of the easement, figuring it would be a win across the board for everyone.

I mean, I immediately got my wrists slapped by Eversource, telling me that it's -- and I quote, "Unlikely that there's any vegetation solution that would make the substation invisible to the properties [inaudible] Drive." So, in other words, to us, "Take what you've been offered and shut up." Both Eversource and UI, told our select woman Brenda [inaudible] that they are reviewing my request, and will let her know what they come up with. So make no mistake, what they should come up with is a plan to restore our property, to as close to what it was when we bought it, whatever the cost. It's unconscionable to think otherwise.

We've been forced into a position that no one should be forced into. These utility companies have destroyed everything in their path, exercising their power with no consequence. We're the only ones suffering consequences, and we never asked for this fight in this first place. And that is why this Act will hold them accountable, and we are in full support of HB 6415. Thank you.

REP. ARCONTI (109TH): Thanks, Stephanie. I think -- Sorry, Senator Hwang wanted to finish up. Is he on mute?

MR. GINN: Sorry, Mr. Chair. I don't think Senator Hwang is called in yet.

REP. ARCONTI (109TH): Okay. We'll move on to questions. There's some hands up. Representative Petit.

REP. PETIT (22ND): Thank you, Mr. Chairman. Thank you, MRS. Johnson, for your testimony. At any time, did any of the Representatives from the companies

agree to come out and walk the property, visually? It seems -- I would think that you can get someone to compromise, if people viewed the situation in person.

MS. JOHNSON: Oh, they did. We had many Representatives from UI come out and assess the property. We had Representatives from Eversource come out and assess. And we've explained, we just don't want to see the substation. If I can share -- I'm not quite sure how to do the visuals.

REP. DEVLIN (134TH): If you can't find the visual on [crosstalk].

MS. JOHNSON: Sorry?

REP. ARCONTI (109TH): Yeah. If you submitted your -- If you submitted your visuals, Stephanie, in the testimony, all the Committee Members have that at their disposal.

MS. JOHNSON: Oh, good. Oh, okay, good. So now, I don't have to stress about having to work the share screen. Yes, they all came out. UI came out. Eversource has come out, repeated meetings. And to them, it's basically, "Well, we have power lines in our yards, too." Yeah, everybody has power lines in their yard, everything is all -- you know, all the power lines that are above ground now. We have a power plant in our backyard, and the -- all of the screening that was left there and the vegetation that is now not there, you know, provided protection. It provided, you know, some safety for -- you know, I mean, my kids growing up, never knew that thing was back there, and thank God because, you know, it is dangerous. But now we are in absolutely full view of their property.

And subsequently, Sacred Heart has also removed tons of vegetation. So now, we can also see what was the old GE Headquarters back there, that is now part of Sacred Heart property. So we're getting, you know,



floodlights and light pollution and everything from -- from them also. But they see the Representatives from UI, and a Eversource have seen the devastation and everything, what we have to look at on a daily basis, and they just --

REP. PETIT (22ND): Yeah.

MS. JOHNSON: Yeah. You know, it doesn't seem important to them to fix it.

REP. PETIT (22ND): And from your point of view there, you think there is a fairly -- fairly simple solution to it, if they would only be reasonable? If I'm understanding your testimony.

MS. JOHNSON: Oh, absolutely. This didn't have to go on this long. It really didn't. We've been dealing with this since 2015.

REP. PETIT (22ND): Thank you. Thank you, Mr. Chairman.

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

REP. CHEESEMAN (37TH): Thank you, Mr. Chairman. Thank you for being here today, Stephanie. So basically, the solution you want is -- is outlined in the Bill. So best-case scenario, you want to see [crosstalk].

MS. JOHNSON: I'm sorry. I didn't understand you, Ms. Cheeseman.

REP. CHEESEMAN (37TH): Sorry. So the solution you want is outlined in the Bill. You want the -- the stipulation that they -- they make the plantings and maintain them, and ensure that you no longer have to put up with this eyesore, is that correct?

MS. JOHNSON: Yeah. Yeah. Pretty much. You know, we had the -- The easement is a little complicated,

so it's 20-foot on either side of the power -- the -- you know, those white big power poles. One side of the easement is on our property, and the other side of the easement is the border of our property and the UI property. And what we really wanted was just a line of evergreen [inaudible] to completely screen against -- I mean, actually, initially, we had come up with alternatives. There was another site in Bridgeport on -- [inaudible] I think is how you pronounce it, which is actually a bigger facility, but they were going to be upgrading that after they had done the expansion on the Hawthorne substation. And we said, "You know, well, doesn't it make sense to consider that facility first? I mean, it's bigger. It's not in the middle of a residential neighborhood. Nobody's gonna be directly impacted to any of the construction, or the runoffs." I mean, we have wetlands here. We abut the cascades, and you know, lake Mohegan. We have all of the wildlife that used to live back there, like the mice and chipmunks, have now taken up residence in my home. So, you know, we have -- it seems that we're just inundated with more and more cost, and more and more -- you know, catch up just to salvage our livelihoods and our investment, and they're not being held accountable for it. And I think this Bill will hold them accountable.

REP. DEVLIN (134TH): If I could interject as well to answer your question, Representative Cheeseman. The Bill specifies a natural barrier. And honestly, I think from what -- where the neighbors came from, initially, it doesn't have to necessarily be trees. They've proposed, you know, putting in some kind of a barrier wall. Something to just shield where once where you bought your home and lived for decades, knowing there was a power plant behind you, but it not only was expanded, it was completely revealed. So you have an industrial power plant directly in your backyard totally unscreened. I think, you know, in part of the deal with may be offering some plantings, was a refusal to even help those plantings get started.

So if somebody's backyard is going to be re-landscaped with multiple trees, I mean, at the minimal, put in, you know, a one-year maintenance to just ensure they root and grow. These are not extreme, you know, requests. And the Bill, I don't think asks for extremities. And quite honestly, if a utility company was gonna be a good neighbor and a corporate citizen, you would think they would take those steps voluntarily.

REP. CHEESEMAN (37TH): Yes. I mean, you're not asking for multi -- you know, thousand-dollar high-end stockade fencing, festooned with orchids or anything like that, which, of course, would be lovely, but --

MS. JOHNSON: You know, if that's -- that's, what you want to give me, I'll take it. .

REP. CHEESEMAN (37TH): Okay.

MS. JOHNSON: But yeah, no, we've never asked for anything that was unreasonable. You know, just to, you know, keep our investment -- keep our investment. I mean, we -- if we were pushed into the unfortunate circumstance of having to sell our home, it's not going to -- we're not gonna get even what we bought for it. I mean, we have the four children, one just recently graduated from Quinnipiac with her Master's degree, and our other three are currently in college. One's a sophomore, and my twins are freshmen. So we have quite a few years to go, and, you know, bringing that, you know, we're not pushed into a really, really difficult decision. And you know, it's -- it's what they've done to -- to it's just -- it's really sad. It's really sad that they're able to, you know, just do what they want and not consider how it affects the livelihoods of - of people.

REP. CHEESEMAN (37TH): All right. Well, thank you.

MS. JOHNSON: Real people, working hard middle-class people that -- you know, all we want to do is raise -- raise our family peacefully.

REP. CHEESEMAN (37TH): Well, thank you so much for coming today and talking to us. And good luck, and we'll certainly be looking at this. So thank you. Thank you very much, Mr. Chairman.

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

REP. FERRARO (117TH): Thank you, Mr. Chair. And my colleagues have flushed this -- this out sufficiently. It's -- There's no reason why, as my colleagues have said that remedies can't be put in place to plant vegetation, and to put in a short-term monitoring program to make sure that the vegetation takes. No -- No, residents should have to have their quality of life changed so dramatically simply because a utility takes upon itself to remove vegetation. So, I stand in support of whatever can be done. Thank you.

REP. ARCONTI (109TH): -- Representative. I know Senator Hwang, Clerk said has -- has joined us. So I want to offer him an opportunity to make some brief remarks.

SENATOR HWANG (28TH): And I will keep it brief. Thank you, Mr. Chair, and Stephanie, and Representative Devlin. Great to join you. Sorry to be late. Let me -- Let me -- And I -- And it might be repeated on the statement earlier, but I'll be redundant. Our experience in raising this Bill was born out of multiple frustrations. And has this Committee and the leadership of this Committee has done, post the recent storm in your microgrid and your grid power arrangement, was to give voice to people who feel as though they have been denied that. I will share with you, as elected Representatives, we made countless -- I've lost count on how many times we have done the due

diligence in -- in a collaborative way to work with these utilities to say, "Be a good partner. Be a good neighbor in a corporate relationship. It is a fractional cost to the multiple millions that you make to be a good neighbor of people and their lives." And we were ignored. In fact, if not worse, just flat out rejected and said, "No."

And then there are certain occasions in which they have broken ground and invaded and violated people's personal property because, by law and by agreement, they have the power to do so. It is one of the -- the last resorts for us to propose this bill, not only for Stephanie and the neighborhood, but for so many other residents throughout the State, that feel as though they were powerless, they were ignored, and more importantly, disrespected. That they should have a voice. And this Legislative Committee and Body has always demonstrated that.

Part of what we do in conjunction with PURA is to give people a voice and recognizing that these quasi-public -- has been -- public utilities have been entrusted with a public responsibility that they should serve Main Street instead of Wall Street. So thank you for that. And I did try to be brief, doggonit. [laughter]

REP. ARCONTI (109TH): There's always next time. [laughter] Thanks -- Thanks, Senator. I don't see any other hands raised for questions or comments. So, thank you, Senator, Representative and thank you, Stephanie, for coming before us today and telling your story.

REP. DEVLIN (134TH): Thank you, Mr. Chairman, and to all the Committee Members. We appreciate your thoughtful consideration of this.

MS. JOHNSON: Yes. Thank you very much, everybody, for listening. And I apologize for the emotion. But it is a little emotional.

REP. ARCONTI (109TH): Representative Ferraro, his hand is back up. I don't know if he -- Now it's back down.

REP. FERRARO (117TH): Yeah. I'm sorry, Chairman. I'm trying to figure the damn thing out.

REP. ARCONTI (109TH): All right. All right. Thanks, guys.

SENATOR HWANG (28TH): Thank you.

REP. ARCONTI (109TH): So next, back to the public portion. Kate Childs from Tuxis Fuel Inc. And then, following Kate, I have Senator Champagne from the public official list.

MS. CHILDS: Hi, good afternoon, Honorable Members of the Committee. I am here today to testify on HB 6412, AN ACT CONCERNING THE LOW CARBON FUEL BLEND OF HEATING OIL AND THE ESTABLISHMENT OF THE BIODIESEL ADVISORY BOARD. My name is Kate Childs, and my family owns, what I like to call, a liquid fuel delivery business, not simply a heating oil company. The attention of this Bill is to reduce emissions in the deliverable fuel market, but this Bill needs some additional changes to accomplish this goal.

First of all, I would like to state that I support the use and sale of biodiesel. I also support the concept that the energy strategy for the State needs to be diversified. And the best part is, you have the power to make sure energy policy doesn't fail. I believe the desire for this mandate is to encourage energy diversification. However, the Bill needs to require a mandate that DEEP include biodiesel as a viable, renewable fuel, and part of our State's future.

Our industry has evolved and adapted to this point without a mandate. And, you have no idea how much heating oil and diesel fuel we've replaced with

biodiesel, because we have no required reporting mechanisms. Therefore, this Bill also needs to include a metric to report the number of gallons biodiesels sold in Connecticut, or consumed within the state.

Finally, since DEEP has gone overtly out of their way, not to include us in the comprehensive energy - energy strategy, twice, and instead published incorrect science on biodiesel. This Committee should mandate that DEEP adopt science from California or another independent body that has published biodiesel emissions reports. This will ensure that our renewable product cannot again, be misinterpreted by DEEP. If these standards are adopted, DEEP will have no reason not to follow the TREC program Massachusetts uses, and support an energy-diverse future for the state of Connecticut.

If the TREC program isn't adopted, the incentive to sell biodiesel in Connecticut is gone. The renewable fuel will be shipped to places like California or Germany who need it, to meet their greenhouse gas reduction goals. I want my kids to know that I fought for a greener product, but we cannot get there without your help. The reporting requirement, and a DEEP requirement to accept the TREC program are vital [inaudible] are delivering 100% biodiesel. The liquid fuel delivery business, and the people of Connecticut are relying on you to create the laws to ensure our future.

And this wasn't part of it, but I heard about the need for [crosstalk] battery backup today. And, you know, there is a lot of storage of liquid fuel used for energy today. In fact, I just got a request to deliver 15,000 gallons to keep a power plant stocked with their storage. So to exclude a renewable fuel, that could be part of our future, as part of our diversification for energy, just doesn't make sense to me. The electric grid has a lot of work to do, to be capable of what is being asked of it. And our industry has the ability and the resources to

continue to develop our product, to get to that point, in the future as well. Thank you for your time.

REP. ARCONTI (109TH): Thank you, Kate. Thanks for your testimony. A quick question. You know, if this Bill should pass, you know, how -- how will it, you know, not only benefit, you know, company -- the family-owned companies like yourself and be better for the environment? How does it impact positively to your customers?

MS. CHILDS: Well, the mandate portion of the bill is -- We are already delivering a significant amount of biodiesel in this State. And as I mentioned, you have no idea how much 'cause there's no reporting requirement. So I don't think initially the piece that is important is the bio mandate. The piece that's important is that, you take the steps to include us in the future, and that's what's gonna make the difference for the people of Connecticut who can't afford to convert to heat pumps, or the 75 people that I employ that rely on this industry and this job to feed their families.

REP. ARCONTI (109TH): Has anyone -- I'm glad you brought up heat pumps. Has anyone put in heat pumps in the service areas that you serve, and then have reached out to you to go back?

MS. CHILDS: We haven't done any heat pump. I can defer that to some other of my colleagues in this industry that will testify later, that can speak to heat pumps more specifically. I can tell you that through work nationally with this industry, that we are also working on an oil-fired heat pump, so that could be potentially a biodiesel fired heat pump that also doesn't strain the electric grid. There are -- there are gas-fired, heat pumps, they are electric-fired heat pumps. So it's -- it's all part of evolution. And, to exclude us as overtly as we are being excluded is really the crux of my testimony.



REP. ARCONTI (109TH): Okay. Thanks, Kate. Those are all of my questions. Wait to see if anyone has their hand raised, give it a minute or two. All right. Seeing none. Thanks for your testimony.

MS. CHILDS: Thank you.

REP. ARCONTI (109TH): All right. We'll jump back. If Senator Champagne is on.

SENATOR CHAMPAGNE (35TH): Yes, thank you.

REP. ARCONTI (109TH): Okay.

SENATOR CHAMPAGNE (35TH): First of all, I'd like to thank the Chairs and Ranking Members of the Energy Committee. And -- And I also want -- I want to talk about SB 256, that's an ACT INCREASING THE PENALTY FOR VIOLATIONS ASSOCIATED WITH THE SALES SOLICITATION COST LISTING. I proposed a bill -- I'm sorry, that's -- I'm sorry, that was HB 6410. But I had also submitted a bill, SB 256. I moved that up a little bit. But, you know, increasing the -- the fines for these companies that are sometimes out-of-country, out-of-state, you know, I support. But I think we need to -- to -- to step it up a little more. And we need to start going after the cell phone companies, the telephone companies because they have technology that can block many of these -- these calls.

A lot of us have gotten calls about our warranties, our car warranties, anybody that here that hasn't gotten one of those, or hundreds of those, you know, I -- you -- you are alone, because I get numerous of those just in one day. But I really think that we need to take a look at, you know, our tech companies, and really hold them accountable for what's happening. We go on the no-call list, we expect not to get these calls, yet they come through. And in fact, some of them, as the call coming through, actually labels it as a spam call.

So they know it's coming, and they should -- they should be held accountable to block this.

That's my main message. That's what I'm trying to push here. I did submit that Bill, and I would really appreciate it, if you took a look at that. Thank you.

REP. ARCONTI (109TH): Thanks, Senator Champagne. I have no -- I have no questions, but I appreciate your testimony. I'll wait, give it a minute to see if any other Members raise their hand. Seeing none. Thanks for your testimony.

SENATOR CHAMPAGNE (35TH): Thank you, everyone.

REP. ARCONTI (109TH): So next is Joan Nichols from the Connecticut Farm Bureau Association.

MS. CHILDS: I'm like, this isn't good if they don't have any questions.

MS. NICHOLS: Good afternoon.

REP. ARCONTI (109TH): That -- Go ahead.

MS. NICHOLS: Yeah. Good afternoon, everybody. So, good afternoon, Senator Needleman, Representative Arconti, Senator Winfield, Representative Allie-Brennan, and Members of the Energy and Technology Committee. I'm here today to testify in support of HB 6409, an ACT CONCERNING ELICITATION OF BIOGAS INJECTION PROPOSALS FOR ANAEROBIC DIGESTERS. Connecticut Farm Bureau urges your support of House Bill 6409. And I'd like to suggest an innovative amendment for on-farm anaerobic digesters, and I'll move forward in referring those ADs in my testimony. There are currently two on-farm ADs operating in Connecticut, one by the Freund family up in Northwestern, Connecticut and Fort Hill Farms up in Thompson, just put their anaerobic digester online.\_\_\_\_

There are two Connecticut dairy farms that are either in the Connecticut DEP permitting process, or in the final stage of design. These two projects will be digesting cow manure produced from their own dairy herds and/or cow manure and chicken manure transported from the large Eastern Connecticut poultry facilities. These are both biogas injection proposed projects.

Connecticut Farm Bureau suggest the committee amend this Bill to include a program like Vermont Cow Power. The Vermont program currently applies to electricity produced by on-farm ADs, but conceptually could be mirrored for biogas injection projects. According to Green Mountain Power, "For every kilowatt hour requested by customers, and provided by a Vermont farm, GMP, Green Mountain Power will pay the farmer for the energy, plus the Cow Power charge of four cents for the environmental benefits of the generation. If there aren't enough kilowatt-hours available from participating GMP farms, GMP will try to require -- acquire and retire, renewable energy certificates from other regionally renewable generation sources issued by the regional system operator to support renewable generation in a broader sense. If there are no certificates available in the regional market for four cents, a kilowatt-hour or less, the company will deposit Cow Power payments into the GMP renewable development fund."

This fund overseen by an independent board will provide incentives for farmers to become involved or increase electricity output into the Cow Power program. I know the Bill before you as a biogas injection bill, and I'm speaking to electricity, but again, I wanted to just stress that there could be a parallel between the two programs.

This is an innovative way for Connecticut dairy farmers to earn a premium for the biogas they produce and thereby incentivizing these projects. This helps Connecticut meet our renewable energy

goals, supports Connecticut dairy and poultry farmers, and satisfies the many environmental benefits that AD technology affords. We look forward to working with the Legislature and our State Agencies to bring this concept to fruition in Connecticut. So with that, I'm happy to answer any questions. Thank you.

REP. ARCONTI (109TH): Thanks, Joan. Thanks for your testimony. Did you -- You supplied written testimony? [crosstalk]

MS. NICHOLS: Yes, I -- Yes, I did. Thank you.

REP. ARCONTI (109TH): Okay, thanks. I'm gonna take a look at that a little later. But any thought or -- you know, it might be tough to answer this kind of off the cuff, but what the -- that Vermont program, in terms of electricity, what can -- what that could do to the delivery rates? Is there any concern on an impact to delivery rates to ratepayers with that type of incentive program?

MS. NICHOLS: This is according to the research that I've done. And I'm more than happy to engage in further conversation on this, 'cause I realize this is a somewhat complicated program.

The Vermont Cow Power program has been in place since 2002. And this is a voluntary additional charge that ratepayers choose to pay, to support green energy supported or provided by Vermont farms. So it's -- it's not necessarily an additional rate pay above and beyond -- It's like a surcharge that a customer chooses to pay in order to support green energy supply by Vermont dairy farms. It's the best way I can explain it.

REP. ARCONTI (109TH): Okay. And does that operate -- by the -- I think Vermont is still vertically-integrated. Maybe Utilities can help answer that question later. But I definitely have some more questions. I'll follow-up with you -- offline on

it. It's all -- There are some Members that have their hand raised. Representative Ackert.

REP. ACKERT (8TH): Thank you, Mr. Chairman. Joan, good to see you again.

MS. NICHOLS: Same here.

REP. ACKERT (8TH): [inaudible] When I was first Ranking Member, a long time ago, of Energy and Technology, and the term anaerobic digester came up. And I had to be at the table Googling what it was, just so I could be part of the conversation. Now it's been through and -- you know, drenched in my brain what we're trying to accomplish here. The two -- The two existing farms that are -- that are completed, Fort Hill Farms, I know the Freund family up there. The process, I know, is slow, but it's completed -- how is the success of those programs working now, can you -- if you can speak to those two -- those two digesters?

MS. NICHOLS: Well, the two digesters that are in place right now, one is up on the Freund Farm, and that digester has been in place since the 1990s. They were the first digester in the State. They just take cow manure and then the solids -- and they produce electricity, and then the solids that come out of that are put into their Cow Pot -- their Cow Pot program to produce Cow Pots. Kies Orr Fort Hill Farm, that is a -- that was permitted as a solid waste facility because she's bringing in, in addition to the manure from her 300-herd dairy, she's also bringing in food waste to supplement the cow manure, and she's producing electricity on that project. But right now, we don't have a program like Vermont in Connecticut for either electricity or biogas.

REP. ACKERT (8TH): Thank you. I know -- I can't remember the woman from Yukon AG Department that has gone up there and sent the video of that actually, of what they're doing in the Green Mountains. And I

know that -- probably Rep. Foster knows her name very well. [inaudible] chime in on this. I think the biggest component to this now that's been coming to light is the need for waste disposal. And the value that the anaerobic digesters are gonna have as we start to lose our opportunity to -- to get rid of our waste with some of the closures happening in our facilities. So, you know, I think I'll let others ask questions, but I know that that's something I need -- that this Committee understands that there's an incentive to have these, that people pay a little bit more -- in essential we're gonna have to find ways to remove waste, and these farm ADs would be -- on-farm ADs would be a fantastic addition to that. But I know that Holly and Representative Foster have some additional questions, so I'll let them. I'll hit my time, Mr. Chairman. Thank you, Joan.

MS. NICHOLS: Thank you.

REP. FOSTER (57TH): We couldn't hear you, Chairman Arconti.

REP. ARCONTI (109TH): Sorry, my first -- my first, my first mute botch. Representative Foster, you have the floor, then followed by Representative Cheeseman.

REP. FOSTER (57TH): Hi, Joan, it's so good to see you. Thanks for being here with us today. I was -- love you to talk to me a little bit more about this Vermont program and share with us what's happening, what -- what their model looks like and what the benefits would be here. I know you know that the on-farm anaerobic digesters would be a meaningful contribution to our local community, and the State as a whole, but -- but what makes the Vermont program something that's a good model for us, for Connecticut to take up on? Can you -- Can you expand on that a little bit?

MS. NICHOLS: Sure. I think, first of all, it's -- it's innovative and something that we have not

really considered in Connecticut. The little bit of research that I've done on it in anticipation of this hearing, right now, the demand for that type of power from consumers in Vermont is exceeding the amount of power that the farms that are putting on digesters can produce there. So there's certainly opportunity for the farms. The GMP customers that sign up for the program of paying a voluntary - I think that's important to understand - voluntary four cent per kilowatt-hour payment on all or a portion of the electric bill. And all of the proceeds from that power go to the -- go to the Vermont farmers that participate in the program and are producing the power. And the customers get their power 100 percent renewable. There is a formula. And do you want me to go a little bit into the details on that?

Okay. So, according to the Green Energy or Green Mountain Power, the customers choose to enroll 25, 50 percent, or all of their electric purchases in the Cow Power program. Which adds a four cent premium, per kilowatt-hour to their -- to their bill. Customers using 500-kilowatt hours per month, paying 25%, who pay -- or who pay 25% electricity under the Rider pay only an additional \$5 a month. At 50% Cow Power, those customers would pay an additional \$10. The farmers received 95% of the hourly market price for the energy they generate, plus the 4% premium paid by the tariff customers with value-added attributes of the Cow Power.

So basically, what's happening is the -- it's a voluntary program, so consumers choose to participate in this. Just like any of us that choose an electric supplier can choose to go to a supplier that's 100percent renewable as a -- you know, if we chose to get our supply from someplace other than an Eversource, we -- we have that option as a consumer. This is a very similar program. And the beauty of this is that these on-farm anaerobic digesters have multiple economic benefits to the dairy farm, and it also has tremendous environmental

benefits. So I think that this conversation -- I think this is a great time to be having this conversation because we -- we keep hearing that we need to support our dairy farmers, and what can we do to do this. They also have manure that they have to get rid of in Eastern Connecticut, where I live. In fact, I happen to live in the town of Franklin with -- with the large chicken farms. We have the third-largest egg producer in -- in Connecticut, on the East Coast is here in Eastern Connecticut. They're at a critical juncture where they need to dispose of all that chicken manure, and we can no longer deposit all of this on our farm fields because of the nutrient loads that are building up, especially in Eastern Connecticut.

So the concept of incentivizing farmers through a premium rate on their electric or gas that they are producing, while at the same time eliminating the farm odors. You know, because right now that methane gas that's coming off of our lagoons or off of the chicken farms are going up in the air. So we're capturing that gas, we're eliminating the odor, we're taking the gas, and we're producing either biogas or electricity with it. We're solving a manure disposal issue, and the farmers are approved -- a premium on the rate, are incentivized to help offset the costs of these projects. If you really think of it in those terms, and that's a very simplistic way of putting it, it solves a multitude of problems.

REP. FOSTER (57TH): And I -- I really liked the way you -- like, we're looking at environmental impact from greenhouse gas emissions, we're looking at it from protecting our waterways. But I think something really important is dairy industry. The dairy industry as a whole is struggling, but they pull the economy in the AD sector. And so, if we can incentivize them to be doing, what many of them already want to be doing, this offers fiscal stability for them to make this move. That's really



fascinating. I'm really glad you were on today to talk to us about this, Joan. Thank you.

MS. NICHOLS: Yeah. And I will just tell you. I was up till about 10 o'clock -- 10 o'clock last night with the Bahler Farm up in Ellington and the Cushman Farm here in Franklin, which are the two dairy farms that are -- Bahler is in the permitting process, they're gonna take just the manure from that 3,000 head plus dairy. Cushman Farms is taking their 1,500 plus head dairy manure, plus they will be, hopefully, taking the chicken manure, as well, because all those farms are in a very close proximity to here in Franklin. And we were on the phone till 10 o'clock last night. I said, "Well, what is this biogas injection bill do for you?" And we were scratching our heads going, "I don't know if it really helps or hurts us." And I said, "Well, tell me why?" And they said, "Well, because it doesn't address the rate that we get for the gas that we produce." And I went to bed thinking, how do we solve this problem? It can't be that complicated. And then I thought, "Well, maybe we looked at Vermont Cow Power, which again is right now just talking about electric rates and conceptualize over that to the biogas end of it. And help these farmers get a secure rate for the gas they are producing, plus a premium, which is a voluntary charge consumers pay." And I thought, "Wow." I don't know. I woke up this morning with an epiphany thinking maybe this is a good way to solve a lot of problems.

And I applaud Commissioner Dykes. I listened to her proposal this morning. She's the agency that's looking at helping with the streamlining of the permitting process. And I know we're not here to talk about that right now, but I think we're having robust conversations around renewable energy and all of these concepts, and I think this could be a really smart way for us to help our dairy farmers, our poultry industry, and produce clean energy.

REP. FOSTER (57TH): Which is good for everyone because --

MS. NICHOLS: Which is great for everybody.

REP. FOSTER (57TH): There is vital nutrients and [crosstalk].

MS. NICHOLS: Absolutely. Fantastic.

REP. FOSTER (57TH): -- security. So, thank you.

MS. NICHOLS: You're welcome.

REP. ARCONTI (109TH): Thanks, Representative Foster. Representative Cheeseman.

REP. CHEESEMAN (37TH): Thank you, Chairman Arconti. Thank you so much for coming today, Joan. I'll be quick. One -- and -- obviously we touched on the -- the length of the permitting process, and you probably -- I'm not gonna have asked you to comment on that, but do you have any estimate of the number of farms that would be interested in having this sort of smaller, larger-scale anaerobic digestion system to -- to tie into something like the Cow Power program in Vermont?

MS. NICHOLS: Right now, as I mentioned, we have two that are already in the State. And I'll just add back up by saying, if any of you that have participated in the rural caucus, Kies Orr, who's the owner of Ford Hill Farms, in March when the weather is a little bit better, is gonna be opening up the digester to tours for legislators, and I would urge all of you to go up there and see it. The technology is just absolutely fascinating. And you really have to see it to understand it, if you're going to be writing rules and laws to incentivize these. So it's really fascinating.

So we have the two that are already in place. We have Bahler's and Cushman's that are either in the

permitting stages or in the -- or in the -- in the design phase. Peracchio Farm in Coventry, [inaudible] Farm, I believe is doing a digester similar to Kies Orr. It's a food waste and -- and manure digester. Those are the ones that I know are actually in play right now. Paul Miller of the Fairview Farm in Woodstock who also just wants to utilize how manure -- he's I think around 750 to 1,000 head, wants to do a digester, very similar to the one that Bahler's is putting in.

And -- And the more you learn about digesters, we have learned that, you know, when you're looking at what we call the smaller dairies, the 200 to 300 head dairies, you really need some sort of food waste to supplement that because you just don't produce enough manure to -- to -- to justify the costs of the project. So, when you start to get to the larger farms, 1,500, 2,000, 3,000 head, then it becomes feasible to just do manure only. And again, in Eastern Connecticut, where I live, the -- the -- the poultry farms is -- this is -- this is a top manure -- manure disposal is top priority.

And -- And the other interesting thing is, when you're taking a chicken manure, chicken manure has a lot of phosphorus in it. When you mix that in, one of the end results is phosphorous. If somehow we can incentivize a project like Cushman's, that can then take that, add on some technology at the back end of the digester, and then turn around and take that phosphorus, and turn it into a saleable product, which is an additional cost, that adds additional revenue to the farm and further reduces the phosphorus [inaudible]. Because there are -- there are solids that come out of the end of the digester that have to be disposed on, either on the farm or recycled into bedding or recycled in for fertilizer.

REP. CHEESEMAN (37TH): Right. Thank you. That -- Doing something with that end-product is obviously vital. And just the -- the quick Google search on

Cow Power, and this is, I guess, from this year, 29, almost 3,000 homes, including Killington Resort, Long Trail Brewing, and the Vermont Clothing Company. So obviously, there's an interest if the people are willing to make that voluntary extra payment to do it.

So thank you so much for your testimony today. And it was wonderful to learn about all these things and definitely, you know, something that moves us closer to clean energy and deals with a problem that -- you know, that's messy and smelly, and we've gotta do something with it -- it's -- it's a win-win for everyone. So thank you so much for coming today, Joan. Thank you, Mr --

MS. NICHOLS: Welcome, my pleasure.

REP. ARCONTI (109TH): Representative Buckbee.

REP. BUCKBEE (67TH): Thank you, Mr. Chair. I apologize. I did miss early part of your testimony. I had a call that came in. And I do have to say, before I forget, Representative Cheeseman referring to it as the end-product, I think is fantastic. That's -- That's how it's supposed to be done.

I represent New Milford. We're a strong and agricultural community. I certainly support all of this. I think it's a great concept to be adding in, to produce additional revenue for the farms. I guess my biggest question I had for you, and I hope this is something I didn't just miss. I'll feel awful. But knowing the size of Connecticut and the farms that we have, how many do you think we could actually support in this State, and certain areas are obviously stronger than others, how many could we support statewide?

MS. NICHOLS: I'd have to get back to you on that. Right now, unfortunately, we -- we -- we've lost a lot of dairy farms in the State. And -- But we still -- we still basically have close to the same

number of cows with the same amount of milk production. There's just a consolidation. And this is not just in Connecticut. This is a national trend and consolidation in our -- in our dairy herds. So right now, I believe we're just under 100 dairy farms left in Connecticut. Which is unfortunate because when I started with Connecticut Farm Bureau 13 years ago, we were well over, I think, 300 dairy farms. But we have the same number of cows.

So again, to your question, they're very expensive projects. Whether you're doing energy -- electricity, or you're doing biogas, they're frightfully expensive multi-million dollar projects. And so the farm really has to have a consideration for the size of their herd. More often than not are investors that are interested in these projects. And then, you know, they have to crunch the numbers, and they have to be economically feasible. And so I know, I'm alluding the hard -- the hard numbers for you, but I think, getting back to this concept, I think if we could smartly incentivize these types of projects, I think we could get closer to potentially seeing more of them -- more of them in the State. And I urge you at some point to take a look at -- take a ride up to Thompson when she opens that up for -- for a tour because it's -- it's fascinating.

REP. BUCKBEE (67TH): Thank you. Yeah, it is -- it is fascinating. I'll follow along with that a little bit. We have a tremendous group in our town. In fact, we've had -- Kimberly Farm in New Milford has come up to the Capitol to show off their amazing chocolate milk, which I'll put against anybody's chocolate milk anywhere, but I digress from the milk.

I just -- One more thing I had say, that's all. And Representative Cheeseman mentioned a smelly problem. To me, that smells like home. I grew up next to a farm. That smell is home. And for those people who are in our -- more urban areas, you're missing out.

Because this is -- this is what it's really all about. And we have to support our farms in any way possible. If this is a new way for them to find revenue, we need to find a way to do that for them, absolutely.

And thank you very much for your testimony. I look forward to reading more. And thank you, Mr. Chair, for allowing me a moment.

REP. ARCONTI (109TH): Thanks, Representative Buckbee. I don't see any other hands raised. So with that, thanks, Joan, for your testimony.

MS. NICHOLS: Sure. Thank you. And more than happy to follow up with any one of you after this meeting. So, appreciate it. Thank you.

REP. ARCONTI (109TH): We do have Representative Michelle on the public officials list. If he is on the webinar, would like to testify. All right, if not -- if he -- if he jumps on, we can circle back. So, on the next, we'll stick with the public list then. Drew Carlson from Global Partners. And then, following Drew will be Stephen Dodge.

MR. CARLSON: Okay. Thank you, Mr. Chairman, and Members of the Committee. My name is Drew Carlson from Global Partners. Global is a leading distributor and marketer for a variety of energy products in the Northeast, and all the way down to the -- the Mid-Atlantic. Within Connecticut, Global operates two wholesale petroleum terminals. We have one in Bridgeport, and one in Wethersfield. We also operate around 60 gas stations and convenience stores in the State, as well.

So I'm here to voice my support for HP 6412. As you know, this Bill would mandate increasing requirements of bio-based product and heating oil. Bioheat is there a sustainable, renewable energy source made domestically in the United States. It burns cleaner and more efficiently than traditional

home heating oil that was used generations ago. Bioheat is just really an example of how the industry has changed over the years and continues to evolve, and how the industry can partner with the states to help meet reduction goals. Global also operates facilities in Massachusetts, where we've seen great benefits in expanded use of clean, renewable biofuel. And we've seen significant reductions in greenhouse gas emissions.

Under the Alternative Energy Portfolio Standard, which is a program that incentivizes biofuel blends of 10% or higher, heating oil use in Massachusetts has been cut by 35 million gallons. Since the program started in January of 2018, more than 80 retail heating oil companies across the Commonwealth are participating in the program and is expected to grow in 2021. So again, the APS program just shows us that replacing -- replacing conventional heating oil with increasing percentages of liquid biofuel is the most expedient and cost-effective path to aggressive carbon emission reductions.

Just in closing, I'd like to, once again, reiterate, our industry is committed to partnering with the State in legitimate, impactful climate change activities that will help achieve the goals set out by the Legislature, and the Governor. The expansion of Bioheat can help the state meet these goals. I ask you to please support House Bill 6412. Thank you.

REP. ARCONTI (109TH): Thanks, Drew. Any -- Any comments? I'm not sure if you saw in DEEP's Integrated Resources Plan towards the tail-end, they had a paragraph or two on -- on NOx emissions with -- with home heating oils and the blends. Kind of a little -- a little contradictory, right? From what we hear with industry and from DEEP in us, you know, legislators kind of in the middle. But we do know California and Massachusetts have -- have taken this on, and I do not think they would have enacted such programs if there were significant emissions,

if -- if it were not truly a cleaner product. So I just wanted to pose that question.

MR. CARLSON: Yeah. You know, I think it's a great question, Mr. Chairman. And I defer to Chris Herb from CEMA, who I know is going to testify a little later on. Again, there's -- there's so much -- so many studies and -- and statistics that are showing, you know, how increased blends can -- can help meet reductions. And I'd love to, you know, get you some more -- some more information. But it's, like you said, Massachusetts is -- is looking to reinstate the old 2008 law, that would be a mandate -- that's a proposal. Rhode Island has a B5 mandate right now, and there's legislation that would increase throughout the next 10 years. And New York's taken a legislation as well. So, you know, to your point, I think that states are starting to pick up that it's a -- it's a -- it's a viable option. And it's -- it's really, to a way that industry can help meet the State's goal.

REP. ARCONTI (109TH): Thanks. Thanks for that answer. I know Representative Cheeseman has her hands up.

REP. CHEESEMAN (37TH): Yes. Thank you, MR. Chairman. Quick question, Drew, is so -- is the biofuel absolutely equivalent on a BTU basis to traditional home heating oil? Or is it more, you get more bang for your buck, or less, or is it equivalent?

MR. CARLSON: I would say, it's equivalent, Representative. Again, we're really seeing that -- And again, I want to defer some of the technical questions to -- to Chris Herb. But, you know, on a -- on a cost-to-consumers, it's -- it's -- it's comparable and, you know, from a terminal facility aspect, Global owns -- you know, we have -- we have terminals in Connecticut, you know, it's minimal upgrades to our assets.



REP. CHEESEMAN (37TH): Okay.

MR. CARLSON: You know, it's something that can -- that can be -- that can be done.

REP. CHEESEMAN (37TH): What makes me ask this question, you know, we look at ethanol, which, you know, it's a green fuel, but actually in terms of the amount of energy it produces, it's actually less energy-dense than gasoline. And my question was, is this, you know, equivalent in terms of the -- you know, the energy bang-per-buck that you get to traditional home heating oil? But if -- you know, I'm happy to ask Chris this question when he appears.

And, you know, along the lines of ethanol, you know, is this absolutely, you know, equivalent in terms of safety for your home heating systems?

MR. CARLSON: Yeah, it's -- it's absolutely safe. You know, we've never seen any issues, none that I'm aware of. And, again, I think some of my colleagues will have, you know, some more feedback. But it's totally safe. And, to my point earlier, there's really not -- there's no -- it's minimal operates to -- to home -- to home equipment and the equipment of the terminals. It's really -- It's -- It's not much of a -- of a leap.

REP. CHEESEMAN (37TH): Okay. Thank you. Thank you, Mr. Chairman.

REP. ARCONTI (109TH): All right. I see no more hands raised. Thanks, Drew.

MR. GINN: Thank you, Mr. Carlson. Next up we have Stephen Dodge, followed by Jeffrey Jennings.

MR. DODGE: Thank you, Mr. Chairman, and Members of the Committee. For the record, my name is Stephen Dodge. I am Director of State Regulatory Affairs for the National Biodiesel Board. And I offer

testimony in support of House Bill 6412. NBB is an almost 30-year-old national trade association, which represents the biodiesel, renewable diesel, and renewable jet fuel industries. NBB members play a key role in state and national programs, aimed at reducing carbon emissions, displacing petroleum, improving public health, and protecting the environment.

Biodiesel is a renewable, low-carbon replacement for petroleum distillate, which is made from used cooking oil, animal fats, brown grease, and agricultural byproducts and co-products. The heating oil industry in the Northeast, and you're gonna hear more from others later on in the hearing, is proactively working towards reducing the carbon intensity of its fuel. The so-called Providence Resolution adopted in 2019 established the attainable goal of net-zero emissions with 100% biodiesel fuel by 2050. Low-carbon liquid fuels will play a key role in the future of home heating in the Northeast, and other Northeast States have recognized that role.

As Drew just mentioned, Rhode Island was the first state in the country to adopt a bioheat mandate. And last week, we testified in support of a bill, which we hope will pass this year, which increases the current B5 mandate to B50 by 2030. New York City, and the Metropolitan Area currently requires B5, with the city proper requiring 20% blends by 2034. There is a proposal to increase the mandate to B20 statewide in New York by 2030. Massachusetts currently has a robust Incentive Program for biodiesel. And bioheat proposals are currently under consideration in Maine and Vermont.

And here in Connecticut, the DEP's draft IRP Integrated Resources Plan referred to earlier, actually suggests that -- and this is almost a direct quote, "The state should consider whether public policy aims relating to biodiesel could be

achieved by merely imposing a statewide biodiesel blending mandate to replace the current mandate."

And it's important to note that carbon reductions resulting in bioheat use are immediate. And to address one of the Commissioners concerns earlier, almost 3 billion gallons of on-spec biodiesel and renewable diesel for transportation and heating was consumed nationally last year. As this fuel has evolved over the past 30 years, NBB and our member companies have prided themselves on our ability to work with standards organizations, to ensure that these fuels, including Bioheat fuel, are quality products that meet all existing ASTM standards, as well as meeting rigorous greenhouse gas reduction requirements. It is important for this Committee to ensure through this Bill, that those standards apply in Connecticut as well, while also ensuring the flexibility required for an all of the above energy transition.

Now, I'll just wrap it up by saying, the General Assembly had it correct back in 2012, when it passed the original version of this Bill. Almost nine years later, the time has come to implement what you started. The science and the technology is even more compelling than it was in 2012. And most importantly, as you know, the urgency to act on climate change has never been greater. And we look forward to working with the Committee and your Staff on this Bill, and we will be submitting written comments.

And Mr. Chairman, if I could just take an extra few seconds to answer your previous question to Drew? Maybe I can address it very quickly if that's -- that's okay with you?

REP. ARCONTI (109TH): Yeah. Yeah. Instead of me, re-asking, I'll just ask you to answer that question.

MR. DODGE: I'm sorry?

REP. ARCONTI (109TH): Yes. Yes. Go ahead.

MR. DODGE: Yeah. Okay. So, you asked the question about the NOx issue.

REP. ARCONTI (109TH): Yup.

MR. DODGE: And that is something that Commissioner Dykes -- She didn't mention it in our oral testimony, but did mention in her verbal test -- written testimony that, there were concerns that bioheat use could increase NOx as well as greenhouse gases. And we respectfully disagree with DEEP's really preliminary suggestion in the IRP that Bioheat increases NOx, but they have raised some valid questions. Late yesterday, in response to the draft IRP, we submitted several dozen pages of comments, most of which focus on that particular issue. Happy to share them with the Committee. We believe that DEEP relied on one study conducted by the APA in 2008 that while credible, uses a method of measuring NOx emissions that is not normally used for such studies.

Our conclusion, contained in the material we provided yesterday, is based on nine other studies conducted by credible entities that show that if you use the method prescribed by the APA, Bioheat use reduces NOx. In fact, the EPA study -- study actually concludes that - and this is a direct quote - "Emissions of all pollutants measured in the study are roughly the same or lower for the biofuels and for petroleum distillate fuel." So, honest mistake by DEEP. And -- And I think it's important to remember that, unlike tailpipe emissions from diesel vehicles, home furnace emissions are not regulated, so the testing of the emissions is not regulated. So you really have to look carefully at all the studies, we've done that and all of them, including that, quite frankly, that EPA study DEEP sites show that Bioheat decreases NOx.

So again, we'll be happy to share more with the Committee. And I appreciate the extra few seconds to answer your question.

REP. ARCONTI (109TH): Right. No. Thanks for answering that question. As you know, it's important for the Committee to hear -- I think, hear that answer. And, you know, important for us to get a grasp on, you know, what we're looking at with potential emissions here. Representative Gresko has his hand raised.

REP. GRESKO (121TH): Thank you, Mr. Chair. Stephen, would you be able to hit the ground running relatively quickly? I know you mentioned in your testimony, the -- the immediacy of the reduction of greenhouse gases, but is there any potential build-out time necessary for this? Or are you just waiting to hit the ground running? You're muted.

MR. DODGE: I'm sorry. It's a drop-in fuel, that's quite frankly already being used now. And I think some of the folks who will testify on this, the heating oil dealers, after me will probably address this issue. There are blends up to B20 that are used quite commonly, now, in fact, probably higher. I know in Massachusetts, B50 is being used. In fact, there's a couple of furnaces that are using straight B100. Very little adaptation needed, very little extra costs needed, particularly for the lower blends. And, again, I -- that's a question that's probably best answered by others. But -- But we're ready to go now. And we're, in fact, already running.

REP. GRESKO (121TH): Thank you, Mr. Chair.

REP. ARCONTI (109TH): Thanks Representative. Seeing no -- no more hands raised. Thanks, Stephen, for your testimony.

MR. GINN: Thank you. Next, we have Jeffrey Jennings, followed by Steve Rosentel.

MR. JENNINGS: Hello. Thank you, Chairman Arconti. My name is Jeff Jennings. I'm a co-owner of Jennings Oil & Propane Company based in Danbury, and [inaudible]. I'm speaking today to voice my support of Bill No. 6412. I am a fifth-generation of my family to bring deliverable fuel to the residents and businesses in the Danbury area. The sixth-generation of my family is learning the business now. And our business is typical of the more than 600 companies that employ about 13,000 people in our industry, in Connecticut. Our business employs 30 people who live in the Connecticut communities that we service. Our employees have good jobs, they have the health benefits, retirement plans, and most own their own homes.

My family has seen the evolution of our industry, over the past 100 years. We have delivered coal, kerosene, heating oil, and propane to area residents and businesses. Another evolution is happening now with the fairly-recent introduction to biofuels. When combined with heating oil, this low carbon fuel blend allows deliverable fuels to meet and exceed the greenhouse gas emission goals set forth by State Policymakers. Our industry is comprised of businesses led by some of the brightest and innovative entrepreneurs that our State has to offer. And -- And our industry is committed to the development and implementation of low carbon fuel blends.

Deliverable fuels has been the primary source of space and water heating in Connecticut for a reason. It is economical, reliable, and it allows us to stay warm on our coldest winter nights. Our company and our employees are part of the fabric of our community, just as the 600 businesses and the 13,000 people spread out over every community in our State. We support our community organizations. We support the local and state governments through the taxes we pay. And since our customers are Connecticut residents and businesses, we're here to stay as long

as we're given the opportunity to continue to be a part of the energy service -- the energy future.

In wrapping up, I -- I want to thank Representative David Arconti and Senator Norman Needleman for their efforts on this Bill, their support of local family-owned businesses, and their attention to proving the environment. Please consider passage of this Bill. Thank you.

REP. ARCONTI (109TH): Thanks, Jeff. Appreciate your testimony. Appreciate you staying on today to -- to testify. You know, you bring up a good point. I know Steve will also testify too, and, you know, Katie -- Kate touched on earlier from Tuxis, is the multitude of generations that are involved in these family-owned -- you know, oil and propane businesses. And, you know, I think that's something that shouldn't get lost on by other Committee Members. I do see a couple hands raised. So I'll go over to Representative Gresko, first. Joe?

REP. GRESKO (121ST): I thought you were gonna go on to Buckbee first. Sorry.

REP. ARCONTI (109TH): Are you dying?

REP. GRESKO (121ST): No, I'm eating. So, my question is, Jeff, do you have customers that are currently using and/or requesting biodiesel that you would -- you can fulfill?

MR. JENNINGS: Sure. We have been supplying Bioheat for low-carbon fuel mix for about seven or eight years now. We have delivered up to a B20 on a regular basis. We find that the fuel burns cleaner when we go to service the equipment. So the answer is, yes.

REP. GRESKO (121ST): Now, did you have to do any kind of retrofitting to that customer in order to adapt to a -- a blend?

MR. JENNINGS: No retrofitting was required.

REP. GRESKO (121ST): No? And the house doesn't smell like French fries?

MR. JENNINGS: It does not smell like French fries. It's -- It's -- It's a product that's available now and has been for -- for quite a while.

REP. GRESKO (121ST): Thank you, Mr. Chair.

REP. ARCONTI (109TH): Thanks, Joe. Thank you, Representative. Representative Buckbee.

REP. BUCKBEE (67TH): Thank you, Mr. Chair. I plan on eating after this, so shouldn't be a concern. Thank you, Representative Gresko. That's great, you made me hungry. I really wanted to step up and just say -- say thank you for the testimony. You know, Jennings has been a big part of this community here in -- in New Milford. I know you guys are well thought of around here. And I think we should be doing what we can to support all of our local businesses in these -- in such businesses, especially the [inaudible].

And I love that -- By the way, this is the one good thing about Zoom. Those of us in Western Connecticut can -- can take a little more time to testify without having to get all the way up there. So, Jeff, I appreciate you taking the time and coming on here, and thank you for what you do in this community. I know I don't represent [Galesville], but it's part of New Milford, so they're kind of the adopted son up there in [Galesville]. So I appreciate what you're doing. I think it's a great thing to support. And, my only concern is -- is how does that affect you with your product as far as the cost of your product passing through to the -- to the customer?

MR. JENNINGS: Well, first of all, we're very excited to be a part of the community. It's a great town



and the [inaudible] section is certainly a special part of it. The cost of the bioheat or the -- the biofuel portion is sometimes less than the cost of heating oil, sometimes slightly more. So, it really does not have an effect on the consumers and what they're paying.

REP. BUCKBEE (67TH): Excellent. Yeah, and then the only one thing to correct there, it's a beautiful part of the best town in the USA. That's all we're going to say about that, but thank you for your testimony and thank you, Mr. Chair for allowing me a moment so I can speak before I go eat. Thank you.

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

REP. MESKERS (150TH): I would just represent a complaint to being short-changed by Representative Buckbee about distance since I've got an hour and 20 commute, and this is easier for me on testimony. But I-- I salute him on his commentary on lunch after speaking. I'm not sure if I would prefer the French fry flavor if we get -- if we used the biodiesel, that was mentioned there by Mr. Jenny -- Mr. Jennings. I -- I think, but in all seriousness, I think I've met with our -- the companies down here in Greenwich who is active and avid on the biodiesel side. And barring any scientific research that would give me pause for concern, I've -- I've not read any as of yet, and I can't understand why we wouldn't be a strong supporter of biodiesel. I think what it does in terms of the carbon footprint, I would guess it's to a zero-carbon emission goal. The jobs it provides in our community. I'm a big supporter -- and the people I've met, are hardworking people who had, you know, at some level a constituent relationship with their clients and the services those generations in both directions. So, I'm a strong supporter and I'm glad we're bringing this forward to look at it. So, I -- I just want to thank them for their testimony.

REP. ARCONTI (109TH): Thanks Representative. Seeing no more hand -- hands raised, thanks -- thanks Jeff for your testimony.

MR. JENNINGS: Okay and thank you for giving me the opportunity.

MR. GINN: Thank you, Mr. Jennings. Up next we have Steve Rosentel followed by Marianne DiMascio.

MR. ROSENTEL: Hi my name is Steve Rosentel. I'm the President of Leahy's Fuels in Danbury. We're a residential and commercial liquid fuels supplier and we're now celebrating our 104TH year in business. Many of our customers we were with the same families for over 50 years.

Let me start by thanking Chairman Arconti and Senator Needleman and the rest of the Committee for working on -- working with all the parties to address what a very real and challenging complex problems that obviously require complex solutions.

I'm here in support of SB 855 an ACT CONCERNING THE DECOUPLING OF PURA FROM THE DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION and also in support of HB 6412 an act concerning low carbon fuel blend of heating oil and the establishment of the Advisory Board.

SB 855 first, let me talk about that one. Several years ago, when the independence of PURA was taken away by moving theme into the newly-formed Department of Energy and Environmental Protection, I thought it was a bad idea. Since that time, we've seen a 180 degree change in the position relating to the expansion of natural gas in Connecticut and the first version of the CES a comprehensive -- a comprehensive energy strategy versus the second.

The early release of both documents, PURA was under the structure of the very agency issuing the documents. Does anyone think that they were really

free to weigh in on what they thought would be the strategy? The current structure has and will continue to have conflicts that prevent the residents and the businesses from getting the oversight that they deserve. We continue to have among the highest utility rates in the nation, and we still struggle to keep the lights on, as demonstrated just as recently as last August, when we had a one-week power outage. PURA needs to be restored to be an independent agency to be able to do their job, and more importantly, for them to be held accountable.

HB 6412. I think it's a good thing for several reasons. Number one, it recognizes that a liquid heating fuel can be a step in the right direction to be environmentally responsible, while maintaining a balance and the energy supply during the transitional years. It also provides core demand for renewable product manufacturers, giving them a gone -- non-government incentive to invest in technologies and facilities. They'll make the investments, if they know there's going to be a guaranteed market for that volume. And even if the overall heating oil market is on the decrease if the mandate has a step-up basis, the demand for that bio-product is going to increase. It also keeps systems in all of your districts working and paying taxes to others as cleaner energy continues to evolve.

As an industry, we are not linked to necessarily selling a fossil fuel, we have fleets of trucks that can develop and deliver all different types of liquid heating fuels. So, we need to be able to survive to that point as these fuels continue to evolve. So, I ask the Committee, please move both these bills forward. I'll be happy to answer any questions.

REP. ARCONTI (109TH): Thanks Steve. Thanks for your testimony. Thanks for signing up. Just -- know I'll just mirror what I said to Jeff about his company,

great to have us corporate partners here and Danbury. All the people you employ and it's not just you know the product, it's what you do for the community outside of, you know, just delivering this product and people keeping -- keeping people warm in the wintertime and every -- every company across the state can say that for their own community. But Representative Buckbee does have his hand up, so I want to call on him.

REP. BUCKBEE (67TH): Thank you, Mr. Chairman and thank you for your testimony Sir, I love the -- the headgear to give look like we're waiting for you to land the planes or something. I think it's great.

Thank you so much for stepping in and -- and saying a couple things. Leahy's obviously another wonderful business with a great reputation in the area, and you know, we'll claim you a little bit in New Milford, too. That's all I'm gonna say about that. Sorry, David we're gonna -- we're gonna take them a little bit here. But I'm glad you also spoke -- spoke about SB 855 and decoupling and -- And really important for us to see the response from local business owners like yourself regarding changes that are large changes, you know, for the State. I think it's really important for us to hear what you have to say on that, and I really want to again thank you for -- for being a part of things and even just a shout here. Thank you so much.

MR ROSENTEL: Thank you.

REP. ARCONTI (109TH): Thanks. I see no more questions. Thanks -- thanks, Steve.

MR ROSENTEL: Thank you.

MR. GINN: Thank you. All right, up next we have Marianne Dimascio followed by Chris Phelps.

SENATOR NEEDLEMAN (33RD): Thank you, Will. Representative Arconti needed to step away for a

little while so I'll be Chairing for a little bit. You guys have to be patient with me on the hand raising part of it, I'll do my best. Marianne, you're up. Thank you.

MS. DIMASCIO: Yes, nice to see you all again or many of you that we've seen before this hearing. Good afternoon Chair Needleman and Chair Arconti and honorable members of the Committee. My name is Marianne Dimascio from the Appliance Standards Awareness Project. I'm here to testify on SB 863 an ACT CONCERNING ENERGY EFFICIENCY STANDARDS.

Our organization works to advance pliant standards at the national and state level. And I'd just like to note that our report we've -- we've done with ACEEE called States Go First provides much of the background for those state standards and products in this bill. So, happy to answer questions about the background on that. So, I think we've already heard that Connecticut has been at this for a while and in 2004 to 2011 they passed -- you all passed three appliance standards bills, but it hasn't been updated or added to since 2011. Connecticut was one of the first states to adopt standards after California and most of those products went on to become national standards, leading to a very large energy and dollar and Co2 savings, excuse me, nationwide.

So just to update you on where other states are. A bunch of states have adopted this package of standards. In the east, we have Vermont, New York, they just did the water products, and Washington DC and then in the west, Colorado, Hawaii, Washington and California have most of these products. And then, this year I think Connecticut is surrounded in that other states are all also adopting -- pursuing standards this year. So, Maine, Rhode Island and Massachusetts in New England and then New Jersey, Pennsylvania and Maryland are also pursuing standards this year.

So, a few things about the products and the Bill there, I know there's been talk today about cost effective for consumers. So, all the products in the bill are cost-effective and for consumers and businesses that purchase the products, with pay back of about -- half of them have no incremental cost on the products, and then there are some that do, but the payback is all less than one and a half years. All of the products that would meet the standards are already on the market -- market today from multiple manufacturers, so we're not -- are not sort of being ahead of the curve and saying go do some new technology; they're all on the market. And no one has to purchase a product or get rid of an inefficient product, it simply means that when someone's ready to purchase a new product, that the choices that are on the shelves will be the more efficient products.

And I know some of the legislators and other people today have brought up issues that are related to the pandemic and the economy. And I just want to point out that this bill as it stands now wouldn't go into effect until 2022, but we've recommended the States that are trying to adopt it this year to change the effective date to January 1st 2023. We usually have bumped it up every year and I believe that's the intent of DEEP is to move it up. So, it would be almost two years before any of these products -- any of these standards go into effect.

And just ending with some earlier discussion there were benefit -- questions about benefits to consumers and low-income consumers. So, I just wanted to give it a couple of examples. One is for one of the consumer products air purifiers that purchasing a more efficient product we've calculated through analysis could be save about \$30 a year on utility bills are about \$270 over the life of products. So that's a significant cost savings, particularly for low-income consumers.

And finally, showerheads, I may have brought this to a hearing before, but I like to just show that this is one of the products we -- it's called Appliance Standards, but many of the products are smaller because the big products already have federal standards. So this showerhead is \$8.99 at my local Ace Hardware store. It uses two gallons per minute and the one that uses two and a half gallons is the same price. So it's -- there's no difference in price. But there is significant savings and we haven't talked much about water today but consumers will save both on energy and water. And if you take showerheads and faucets together, those are two of the biggest savers in the Bill, and they account for about \$20 million of the \$59 million that will be saved by consumers and businesses in 2026. So, I just wanted to note that, and that there is no incremental cost for those.

So, in closing, I'll just be very happy to provide further information and I'll just end with comments from my State Rep in the Massachusetts bill sponsor who loves to call this -- this bill a win-win-win. So, thank you very much I'm happy to answer questions.

SENATOR NEEDLEMAN (33RD): Thank you, Marianne, I appreciate it. I'm not seeing any -- oh, I do. I see Representative Mushinsky's hand up.

REP. MUSHINSKY (85TH): Thank you, Mr. Chairman. I got a -- I got tipped off by a person who -- a researcher who used to work for [inaudible] Connecticut who said that if we didn't amend the Statute 16A-48, we would have the effect of our standards be superseded by the weakened federal standards on things such as water showerheads and because the Trump Administration had watered down some of these standards. And it is more difficult to change that back because it's a Regulation. So, do you agree with his analysis that we are gonna -- an issue with the Federal standards for a time being weaker than -- than our state standards.

MS. DIMASCIO: Well, in part, that's actually how it is right now. The thing they weakened on the federal level was to allow multiple showerheads. I -- I won't get into details, but you can have a shower head with four nozzles and they could each use two and a half gallons. So, that's -- that's a part of what they did on the federal level. But as it stands right now, you have the State without State standards has the weaker federal standards. So, you would -- there's a lot of wasted energy and water, as it stands right now. So, the State by adopting this would improve on what the federal standards are.

And I would say these plumbing products are the only products with federal standards because they were adapted a long-time long time -- time ago in 1992, but never updated. So, the Federal Government has waived pre-emption and that's what allows these states to have the more stringent standards. So, there's I think, just for showerheads it's about \$10 million dollars a year you'd be losing initially for showerheads and that number will grow as the years go on and more people purchase them. So, yes to your question it -- it -- it would put the State at the lower federal standards.

REP. MUSHINSKY (85TH): Okay, and the Bill does not fix that. Correct? So, we would have to make an amendment to this bill to correct that problem?

MS. DIMASCIO: No -- no, it does. The federal standard right now is two and a half gallons per minute and the standard in this Bill is two gallons per minute, so it does correct it. It makes it more stringent. And the other rollback thing I believe that they will try to work on -- on the federal level. It was something about the definition of showerhead. So that is not -- that would be preempted. You can't change that. I don't believe.



REP. MUSHINSKY (85TH): Okay, this is a very meaty bill and I've been trying to read it all and I just want to make sure we don't leave ourselves vulnerable to a weaker federal standards. So, but you've obviously read it further along than I have, and your opinion is, we are not -- we are not in danger of being subject to the weekend federal standards.

MS. DIMASCIO: No, you're doing exactly the opposite. You're getting stronger state standards. So, you'll capture those significant savings from the showerheads and faucets. Yes.

REP. MUSHINSKY (85TH): Okay. Well, that -- that really relieves my mind, so thank you for weighing in on that.

MS. DIMASCIO: Thank you.

SENATOR NEEDLEMAN (33RD): Thank you, Representative. Thank you, Marianne. I don't see anybody else with their hand raised. So, thank you so much for testifying.

MS. DIMASCIO: Okay, thank you.

SENATOR NEEDLEMAN (33RD): Will?

MR. GINN: Thank you. Next, we have a Chris Phelps followed by Katie Reilly.

SENATOR NEEDLEMAN (33RD): Chris, you're up. Is Chris here?

MR. GINN: Yeah, he's coming -- he's coming in now.

SENATOR NEEDLEMAN (33RD): Okay, great.

MR. PHELPS: Hi, Senator. Can you hear me now?

SENATOR NEEDLEMAN (33RD): Can you hear me now? Yes, I can.

MR. PHELPS: Okay, I think I was waiting to be let-- let into the room here. Hi. Thank you. I'm Chris Phelps, State Director of Environment Connecticut. And we have -- I have comments that we have submitted on Senate Bill 860. I think we may be submitting additional comments on some of the other bills before you today but focus on that one at the moment.

It's always tough testifying right after Marianne because I almost could just finish my testimony by saying, well, what she said. Our testimony does look early -- eerily similar to hers. We are a non-profit member supported environmental advocacy group here in Connecticut and we strongly support this Bill. We worked in support of previous efforts by this Legislature in 2004, 2011 and at least one other -- one or two other sessions in which you've adopted similar product efficiency standards.

And I think it's been about a decade since Connecticut updated its product efficiency standards statute. And it's high time, as has been tested by until already, lots of states moving forward with the same suite or a very similar suite of standards that are contained in this bill and for discipline.

We -- let me start as Marianne, I think just earlier she said, it's a win-win situation energy efficiency for the economy and for the environment in Connecticut. To not adopt standards -- efficiency standards would harm consumers and businesses in Connecticut by literally making them more energy consume in our daily lives. I don't think that's any -- anyone wants to do, but if we don't adopt these -- these standards, we'll have a lot more inefficient products on the market in Connecticut and coming years.

So, in all seriousness, I'm not going to read through my testimony because Marianne hit many of the same exact points that I do. I was -- I will say

on a little bit of time I have left that I was reviewing some of the testimony by a couple of the industry associations that testified in opposition in this Bill. In some places they were, I think it was the Consumer Technology Association seem to focus on testimony largely in opposition to the existing statute that's been in Connecticut for I think the better part of two decades now. We -- you know, that really I think exemplifies, you know, what's good about this bill that you know if -- it these standards have been in place for so long and have worked for so long for Connecticut for the products we have currently, that it really is a no-brainer for Connecticut to adopt these updated standards for which there are products available, these aren't technology forcing. We're not telling the industry to go out and create new products, but rather, to focus on selling products that exist, that are cost-effective energy efficient for Connecticut.

[Coughs] Excuse me. These really are a no brainer for our state. They make sense for consumers, they make sense for our economy. And we urge the Committee to -- to adopt these standards and move -- move Connecticut forward when it comes to strengthening our economy, putting -- reducing energy costs for consumers and making our economy and -- and the products in the marketplace more efficient.

I just wanted to speak -- I'll close by speaking to one specific argument that I read in some of the testimony and that relates to the -- the relationship between these types of state product standards and the Energy Star system. These are complementary standards, complementary ideas that in essence leapfrog each other as products become more efficient, these -- this flow that the state of Connecticut and other states have set really serves to -- to -- to raise the bar incrementally as time goes on, and as the Energy Star, as -- as the products in the marketplace become essential

universally compliant within the Energy Star [inaudible], that becomes the flow, the state standards flow of Connecticut and Massachusetts states across the country.

That's actually how systems work and has worked to make these products in the marketplace and our economy, efficient and more cost-effective for everyone. So that's a good thing. Is -- is the point I wanted to make.

I'll stop there. Again, we strongly support this -- this Bill. That can't possibly be a surprise to any of you. But I'd be happy to answer any questions you might have. Thank you.

REP. ARCONTI (109TH): Thanks -- thanks Chris. I'm back taking over for Norman for a second. I'm actually very surprised you're -- you're still supportive of this Bill, definitely caught me off-guard.

MR. PHELPS: I do recall, Representative.

REP. ARCONTI (109TH): Always -- always take a curveball. I do want to ask not in this Bill, but I know Environment Connecticut always participates in the public comment period a lot in PURA and DEEP, you know, active in a lot of dockets you know, on behalf of the environment and ratepayers. So just wondering if your organization had any thoughts on the decoupling Bill, you know, we've been -- it's been about a decade, right, so this is really the first time the Committee has heard, you know, it is the opportunity for the Committee to hear feedback from people who participate with the agencies a lot more often, you know, throughout the whole year.

MR. PHELPS: Sure. In all honestly, Representative, that is one of the bills on your agenda that we may be submitting comments on following the hearing. We haven't taken a position yet on it to be -- to be clear. There are arguments for that Bill, there are

arguments against it, that -- that it's actually a pretty difficult conversation, we haven't taken a position yet. I think -- I think that's really, all I can say on it at the moment.

REP. ARCONTI (109TH): Okay. That's fine.

MR. PHELPS: We're trying -- we're trying to answer that question for ourselves, because I think it does balance competing interests when there's a strong argument for -- for -- there's an argument for the existing system and there's an argument for doing something along the lines of what this Bill discusses.

REP. ARCONTI (109TH): Alright, yep. If you've decided --.

MR. PHELPS: I'll have to get back to you on that. I really apologize to dodge the quest -- for dodging the question.

REP. ARCONTI (109TH): It's okay -- it's okay. It's a tough question -- it's a tough -- it's a tough issue, tough question, I understand. But if you guys end up submitting testimony to our Clerk, make sure you let us know, we'd like to take a look at it. I know Representative Petit has his hand up for a question. Representative Petit.

REP. PETIT (22ND): Thanks, Mr. Chairman, and I apologize if this was a state because I've been in and out of a couple other things. Well let's prevent the consumer from, you know, saying the example of, you know, flow to two gallons per minute and if for a certain situation, you needed four to six gallons a minute, will those products still be available or at a higher price or how does that work in terms of the ability to use something at a -- at a different level?

MR. PHELPS: Well, I'll start by saying Representative, you're -- you're -- you're asking me

about one of the standards -- product standard which I'm probably the least familiar. I have to embarrass -- embarrass myself and acknowledge that. So, I really can only give you more of a general answer. I'm sure Julia Dumaine from DEEP or the Commissioner could give you a much more precise answer than I can. But these do establish a baseline playing field for -- for -- for, you know, for all products because I think, you know, I really, I can't answer that question. I should be just -- I -- I don't have the answer to that question. I could try to get an answer for you or connect with the staffing agency who probably would be able to give you specific answer better than I could. Sorry.

REP. PETIT (22ND): Yeah, I mean, I guess it's not specifically for that, does it outlaw all the products that don't meet the standard or can you still obtain that product at a increased price or an increased tariffs?

MR. PHELPS: Oh. Well, that part I would say no, if I understand the question on that part. This establishes a -- a minimum standard and all the standards of this bill are written specifically to adopt a minimum standard for which there are products available. This isn't trying to tell the industry, we have to go out and create new products that don't yet exist, but rather it creates a minimum floor for energy efficiency or water efficiency in this case. And products that fall below that floor that aren't that efficient would not be available for sale and shouldn't be because frankly they're not cost-effective is part of the point.

But it does nonetheless though set the floor at a level that's reasonable in terms of, there are products on the market that meet the need and are cost-effective. That really is the point so. But -- but no, a manufacturer could not sell in Connecticut a product that doesn't meet that minimum standard.

That would not be -- that's the point of the Bill, I guess, in a nutshell.

REP. PETIT (22ND): Thank you -- Thank you, Mr. Chairman.

SENATOR NEEDLEMAN (33RD): Thank you, Representative Petit and thank you, Chris for testifying.

MR. PETIT: Thank you, Sir.

SENATOR NEEDLEMAN (33RD): Will.

MR. GINN: Yes. Thank you very much. next we have Katie Reilley followed by Patrick McDonell.

MS. REILLY: Thank you and thank you, Chairman Needleman, Chair Arconti and honorable members of the Committee for the opportunity to testify today on Senate Bill 863. My name is Katie Reilley. I work for the Consumer Technology Association or CTA. Our members are the world's leading innovators from startups to the global brands that you're probably using for this hearing today. I'm hoping to support over 18 million American jobs.

We represent computer and computer monitor manufacturers and brand-owners, which are a targeted products category and this Bill. And while we share the Legislator's goal of increasing energy efficiency team, we are now believe that the approach outlined in SB 863 is the path to get there.

I just want to touch real quick just to start off on Chris's testimony, he mentioned that CTA was objecting to the State specific standards for products that Connecticut already regulates. If you look through our written testimony, we're not objecting to any existing standards to current products. And in my testimony here, I'll touch on the two areas of concern that we actually have related to the Bill.

But just to start off as a history, for the past 15 years, CTA and our members have worked aggressively on energy efficiency issues for consumer electronics. We've quantified through peer-reviewed studies that while the number of electronic devices in U.S. homes has increased 21% since 2010, those devices now account for 25% less residential energy consumption over the same time period. And you know this is really a landmark achievement that's due to the tech industries' innovations and investments not because of mandated state or federal requirements.

So, with that context in mind, the two areas of concern that we have on Senate Bill 863. The first is the requirement for computer and computer monitors sold in Connecticut to meet the California Energy Commission or CEC standards in order to be sold within the state. What's important to understand about our category of products is that our company sell products into U.S. or North American market. The CEC standard for energy efficiency for computers and monitors is the most stringent standard found within that market and as such, it kind of serves as the de facto national standard. So, what this means is that the computers and monitors that are all ready for sale in Connecticut meets the California standard for achieving energy efficiency savings without the state of Connecticut doing anything or creating any kind of government mandate on industry. And so, from our perspective, the Bill is really a solution looking for a problem for our category of products.

And you know, with all due respect to the testimony, the ratepayer's savings claimed by DEEP specific to our category of products will happen regardless of any action that the Connecticut legislature takes to mandate the CEC standards for computers and computer monitors. Those savings are already naturally happening in the marketplace as a result of the passage of this Bill.



The second part I wanted to touch on quickly is just we are requesting the removal of both the existing language and new language and that provides blanket authorization to DEEP to establish energy efficiency standards for virtually any consumer product. You know, as I just kind of noted, our company sells products into U.S., North American market, we aren't designing or making products and with a specific energy standard for Connecticut versus California versus Washington versus New York. So, the ability for Connecticut to set its own set of energy efficiency standards that may compete with another jurisdiction raises a lot of concerns on our end and from our perspective is not the right approach.

So, with that I again, I just wanted to reiterate, we are firmly committed to energy efficiency across our industry. The residents of Connecticut are already receiving the energy-efficiency savings and reaping those energy-efficiency benefits by having the California standard in place. We just don't think SB 863 is really the right path forward for our product, specifically. And so thank you very much for your time today and I'm happy to answer any questions you might have.

SENATOR NEEDLEMAN (33RD): Thank you, Katie. I'm assuming you're not running for a plane today.

MS. REILLEY: I'm not running.

SENATOR NEEDLEMAN (33RD): Well, that's good news.

MS. REILLEY: I was actually joking with someone earlier. I do miss the free Dunkin' Donuts strategically placed [inaudible] for the airport, but no, not running for a plane today.

SENATOR NEEDLEMAN (33RD): We didn't have to have you cut the line. In some ways, this is better. It's easier and less traveling for you. Thank you, we understand your position on this. I have my own concerns about Connecticut creating its own

standards. On the other hand, that interest competes against Connecticut trying to help set the standards and both are important to consider. We do want to be leaders in this. And I think the point of state jurisdictions doing this is to incentivize the higher standard for the whole country. Connecticut is small, we can't do it alone. California tends to be the leaders in this and in some areas, we follow, and I agree with them. And in some areas, we follow, and I don't agree with them. But this time we'll have a conversation separately about the computer monitors, but -- and you know, I don't think that this Bill presents so much of a problem, at least as far as I can tell. So, I think we have a couple of people. Representative Cheeseman.

REP. CHEESEMAN (37TH): Thank you -- thank you, Chairman Needleman.

SENATOR NEEDLEMAN (33RD): And Representative Ackert.

REP. CHEESEMAN (37TH): Do I get to go first, or did I jump the queue? All right, thank you. Thank you for coming today. Just specifically touching on the computer monitor issue. Are there, you know, is the most efficient computer monitor so much more efficient that we're crazy not to adapt? I mean, what -- what are we looking for in terms of incremental gains, you know, improvements?

MS. REILLEY: So, I think our point is more that in order to -- So California, is obviously one of the world's largest economies on its own. So, our point is that it is already the de facto national standard. So, the products that residents are buying in Connecticut already meet the California standard without the adoption of this. So, based on our knowledge and our intel, you can't buy a product right now in Connecticut that would be less efficient than the California standard. For CTA's members in the computers and monitors that we put out on the market, anything sold within the United

States, in any state is already meeting those California Energy Commission standards.

REP. CHEESEMAN (37TH): So, this would be an issue that Connecticut now decides to set more strict -- stringent efficiency standards solely for sale in Connecticut. Is -- is this your concern with this?

MS. REILLEY: Our concern is more just increased -- it's increasing compliance burden on our member companies, if that makes sense. So now we have to prove in the state of Connecticut that our products are compliant with another state standard when that state -- that other state standard, the California standard is the most stringent standards and is the baseline for all of our computers and monitor sold within -- within the United States. So, it's just -- it's an unnecessary -- from our perspective, it's an unnecessary regulatory burden to not actually increase energy efficiency savings for the residents of Connecticut.

REP. CHEESEMAN (37TH): So, it's an additional bureaucratic hoop -- a regulatory hoop through which you would need to jump that you feel is just duplicative, unnecessary, whatever.

MS. REILLEY: Correct.

REP. CHEESEMAN (37TH): Okay, thank you. I didn't mean to put words in your mouth there, okay.

MS. REILLEY: No, I would probably use the same words. So, thank you.

REP. CHEESEMAN (37TH): Thank you so much Katie. Thank you, Chair Needleman.

SENATOR NEEDLEMAN (33RD): Thank you, Representative Ackert, followed by Representative Meskers.

REP. ACKERT (8TH): So, just a quick question and thank you again Katie for being here. Just following

a little bit, I'm just -- my concern is that we're -- we create a standard that you just mentioned, creates a baseline. But your product that you sell now is sold throughout the country. So, Massachusetts, Connecticut are already getting high efficiency products now?

MS. REILLEY: Correct, they are already getting the product that would need to California Energy Commission standards.

REP. ACKERT (8TH): That is kind of my concern that Connecticut sets those standard, but I wanted it to be a regional standard. So that sounds like you've already doing in yours, so it doesn't need to be in this piece of legislation. But that's what I'm concerned about for all the products that are going to be found in this document. But I think that that's what I think our goal is. That it's more of a regional, because if you can go and get a cheaper, not that we're saying that they're cheaper, who knows if they or not. But I thank you for your testimony and I thank you, Mr. Chairman.

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

REP. MESKERS (150TH): Thank you, Senator Needleman. So, I'm confused about -- but I understand the concern. So it would seem to me that the more logical solution to the issue is that you'd be asking for Connecticut to acknowledge and work on reciprocity with California on the regulatory environment. Because if the de facto standards are being set in California and we're on par with them, then maybe, what we need is legislation that requires us to acknowledge or require that reciprocity so that the only thing you have to affix to the box is that it needs California Regulatory Environment versus that you begin to have -- I mean, if the same standards on multi-state, the question of reciprocity might reside better than the Legislation than for you to prove the rest of the --

the -- that you meet a -- the identical standards with requires any additional testing or certification, right.

Now, you may not want us to adhere completely to California standards across all of your issues which may be a separate problem. But if we're talking about monitors in California setting the standard, maybe perhaps it's the wording of the Legislation. And I'd suggest to her, Chair, I guess the question is where we want to lead, where we -- where you won't be happy, and we lead and set regulatory benchmarks. But if we're using identical regulatory benchmarks, perhaps we need to consider reciprocity in the Bill so that it's easier for the producers of the product to say it meets the standards in California, de facto, it meets the standards in in Connecticut. So we can -- so we don't make the requirement that you have to get certified in 50 states. Does that work at all?

MS. REILLEY: Well, I -- while I respect that I -- we kind of hold strong in our point that it's not even -- it's not even necessary for Connecticut to go down that path, because the products are already available in the State of Connecticut.

REP. MESKERS (150TH): Well, there's -- there's a philosophical question there and then the question is the -- and the regulatory issue. And I would say philosophically I'd be happy to look at reciprocity on the regulatory framework. Then, and I understand why -- why you don't want 50 different regulators telling you what goes into a monitor. But I might be happy to figure out that if there isn't a national standard and -- and we have a market driver in California that we look at reciprocity. I humbly submit maybe we can meet somewhere in the middle. And it's just an idea.

MS. REILLEY: Happy to -- happy to work with you on language as necessary, but again, from our perspective California, is the de facto national

standard. All computers and monitors being sold in -  
- in the United States meet the California Energy  
Commission standard. But happy -- happy to discuss  
further offline as needed.

REP. MESKERS (150TH): Great, thanks.

SENATOR NEEDLEMAN (33RD): Thank you, Katie. I don't  
see anyone else's hand raised. I just have one last  
question. When you talk about monitors, you mean  
separate monitors not the portable laptop that's a  
monitor?

MS. REILLEY: I believe laptops are defined within  
the definition of computer. I can follow-up with you  
on that. In California the laptops are included in  
the definition of computer rather than falling  
within the definition of computer monitor. If that's  
what you're inquiring about, that's where laptops  
fall. So, yes, monitor -- monitor, I believe, is  
referring to the stand-alone computer monitor.

SENATOR NEEDLEMAN (33RD): And how many are still  
sold? I mean, between tablets and laptops, I mean, I  
happen to have a monitor, but I'm old.

MS. REILLEY: That is -- that is a great question. I  
can talk to our market research team and see if they  
have any data I can share with you on that.

SENATOR NEEDLEMAN (33RD): I'm just wondering if  
we're having an argument over nothing at this point.  
So, anyway separate conversation we can have at  
another time. I really appreciate you're coming and  
get to the airport and get home.

MS. REILLEY: Sounds wonderful. Thank you, Senator,  
for the time today.

SENATOR NEEDLEMAN (33RD): Take care. Will, up next?

MR. GINN: Thank you. Up next is going to be Patrick  
McDonnell, followed by Howard Peterson.

SENATOR NEEDLEMAN (33RD): Thank you.

MR. MCDONELL: Good afternoon, Senator Needleman and can you hear me okay? Good afternoon, Senator Needleman.

MR. GINN: We can hear you. Thank you.

SENATOR NEEDLEMAN (33RD): I can hear you. I'm sorry.

MR. MCDONELL: That's okay. Representative Arconti and Ferraro, members of the Energy Technology Committee, my name is Patrick McDonell. I'm the Vice-President of regulatory affairs for UIL Holdings Corporation, the parent company of United Illuminating, The Southern Connecticut Gas Company, Connecticut and wholly-owned subsidiary of UIL Holdings Corporation. Thank you for this opportunity to offer testimony and several raised bills before you today.

The first raised bill I like to comment on is House Bill 6409 and that concerning the solicitation of biogas injection proposals from anaerobic digestion facilities. UIL Holdings Corporation as a company has a large focus on deploying clean energy technologies. We support the potential use of biogas from anaerobic digestion facilities as another tool to reduce the impact of carbon emissions, provided that the quality of the biogas is comparable in its energy content than natural gas, and that the cleanliness is sufficient to avoid any issues with our customers' use of the products.

And also, look to Connecticut's Department of Energy and Environmental Protection, as well as the Public Utilities Regulatory Authority, to monitor the overall cost of this initiative, and they should have the ability to terminate any initiative that's not in the interest of ratepayers. With these requirements, we support House Bill 6409.

The next raised Bill I like to comment on is Senate Bill 856, an act increasing representation on the energy conservation management board and also Senate Bill 863, an act concerning energy efficiency standards.

UI's long-supported energy efficiency efforts for its customers benefits has administered award-winning energy efficiency programs for many decades and I've been a part of those for many years myself; these efforts in Connecticut have been advanced with collaborative efforts that have premier -- primarily been centered around the activities of the Energy Efficiency Board. Senate Bill 856 continues to advance the importance of the energy for seaboard and in conjunction with Senate Bill 863, continues to advance the importance of energy efficiency in Connecticut. Our grid supports these bills as cost-effective tools to assist Connecticut in the achievement of its cleaner energy goals.

The next Bill I'd like to comment on a Senate Bill 862, an act limiting eligibility for the residential solar investment program and preventing distributed energy generation solicitations from segregating large projects. As the solar industry continues to mature and the cost of solar systems continue to decline, one of the largest factors in the cost of the energy generated from solar systems is the developmental cost of individual projects. This is particularly true of individual customer side behind the meter installations, where solar developer needs to sell the installation to each end-use customer one project at a time. Results, is these behind-the-meter systems receive higher centers in a grid scale project would receive. And the customer side programs are broken into groups based on size limits to allow further matching the size of the system to the appropriate incentive level. Developers are always interested in maximizing the size of the incentives they receive and stacking incentives together wherever they can. This Bill would clarify the eligibility criteria for those incentives and



eliminate the opportunity for developers to tailor their projects to beat the program rules for their advantage. We support this Bill as drafted.

The next Bill I'd like to comment on is his House Bill 6415, an act requiring the public utility regulatory authority to adopt regulations for natural barrier preservation and maintenance by electric distribution companies. We understand the aesthetic impact that our necessary electric facilities can have on a community and we've always strive to work closely with municipalities and neighbors in order to address these concerns. We support PURA having the ability to implement standards to balance repair costs associated with implementing such a standard with the interest of the communities and having an attractive installation in their neighborhood. We would also suggest that there may be a role here for the Connecticut signing Council when new facilities are involved. With these considerations, we support House Bill 6415.

The last raised Bill I'd comment on today is Senate Bill 864, an act concerning the valuation of certain properties for municipal purchase. We find this Bill particularly troublesome because it appears to set arbitrary evaluations for the purchase of some of our assets for some unknown reasons. On its face, the Bill appears to have violated the takings clause of the Fifth Amendment, the Constitution which provides a private property shall not be taken for public use without just compensation. It's further troubling because it allows municipalities where the facilities are located to purchase these assets without consideration for how they might be used by us to serve customers in other towns. We feel this Bill may have numerous unintended consequences, and for these reasons we provide here today, we oppose this Bill.

Thank you for the opportunity to comment on these bills today. We appreciate the opportunity to be part of the concert -- conversation to advanced

Connecticut's energy agenda and protect consumers. I'd be happy to answer any questions that you may have today.

SENATOR NEEDLEMAN (33RD): Thank you, Pat. I was really looking forward to owning my own transformer.

MR. MCDONELL: You're certainly entitled to, Senator.

SENATOR NEEDLEMAN (33RD): Couple of poles and a transformer, I feel like I'd have my own utility. Does anybody have any questions for Pat? I know Representative Arconti who had taken a break for a minute, I think he wanted to speak, but I'm not able to get him back. Now I don't see anybody else with their hand raised. With that I appreciate --

REP. ARCONTI (109TH): I'm back.

SENATOR NEEDLEMAN (33RD): All right, we got him. Representative Arconti, it's all --

REP. ARCONTI (109TH): Hi, Pat, how you doing?

MR. MCDONELL: Good afternoon Representative Arconti. How are you today?

REP. ARCONTI (109TH): Good, good. So, I wanted to just ask you a couple quick questions. One, I'm sorry I didn't any catch all your testimony, but was there any testimony on Senate Bill 855?

MR. MCDONELL: 855. 855, no.

REP. ARCONTI (109TH): Okay.

MR. MCDONELL: I did not testify on 855.

REP. ARCONTI (109TH): Any comments?

MR. MCDONELL: Let me just refresh my memory, on which one. 855.

REP. ARCONTI (109TH): It's the decoupling -- decoupling of PURA and DEEP as one of the regulated --.

MR. MCDONELL: Oh, okay. I -- I would -- I would say that we don't really have a position on that. I've been dealing with -- I've been around long enough that I've seen the DPUC prior to the creation of DEEP and I can say that in my dealings with -- in proceedings before PURA, you know, we see DEEP as a party to the proceedings. So, we don't really see any issue with the status quo.

REP. ARCONTI (109TH): Okay, that's fair. I just wanting to try to get you guys on the record, since you -- before -- you appear before them very often and -- And then on the energy efficiency, you know, we touched on decoupling, you know, a little earlier with the Commissioner and her team on that. So, my question to you, since you're the first utility up today. Would the utilities be such strong proponents of energy efficiency measures without revenue decoupling mechanisms in place?

MR. MCDONELL: I think I would say that we have advanced energy efficiency measures for many years prior to the advent of revenue decoupling, so I -- I can't imagine that -- that would change as a result of a change to revenue decoupling, you know. What I would add, is, I would echo -- go ahead.

REP. ARCONTI (109TH): No, just, you know, finish.

MR. MCDONELL: I would say, yeah, I was gonna say I was gonna echo some of the comments that Deputy Commissioner Hackett raised earlier around you know, in -- when there's an increasing consumption, like, I think we all expect in the near future as a result of electric vehicles and electrification of heating that it would work, I think, against the best interest of consumers after not return excess revenue to customers that we got from increase -- increased sales. And also, if we had a summer like

we had this past summer where we have very high hot weather and we had increased loads as a result of that. With the decoupling, that -- whatever that revenue would be would -- would be returned to customers. So, I think that it works both ways.

REP. ARCONTI (109TH): Okay. Yeah, that was gonna be my follow-up question. I just asked him to if you had a response to Deputy Commissioner Hackett's comments on how -- how it can benefit ratepayers in the reverse when, you know, demand ramps up and there's that increase. So that's -- those are the only questions I have. Thanks, Senator Needleman.

SENATOR NEEDLEMAN (33RD): Thank you, Representative Arconti. I see Representative Ackert has his hand up.

REP. ACKERT (8TH): Thank you, Mr. Chairman. Thank you for being here Mr. McDonnell. Just a comment. I just was going over the -- I think the last Bill you touched on the one regarding evaluation of certain properties for municipal purchase. I know you've made a comment about the Fifth Amendment, but also, I was just looking at the value that was set on the -- on the -- on the -- on the items. Could you take a look at that all? It just says, the price to be paid for a substation in shall be \$100,000 and a price for a utility pole is \$500.

MR. MCDONELL: Yes.

REP. ACKERT (8TH): I can't even imagine that those are even close.

Mr. MCDONELL: Yes.

REP. ACKERT (8TH): Okay. That's what I was -- I was thinking.

MR. MCDONELL: I think they would be -- yes. Yes, I would agree with that Representative Ackert. Yes.

REP. ACKERT (8TH): Utility -- If there is a utility, typically in every community, you're the highest taxpayer. And I'm sure that these properties are part of the properties that are -- that are under the property tax whether they you pay property taxes. And I'm sure that--that's probably more near the property tax value than it is actually the value of the property.

MR. MCDONELL: I can't say where those valuations came from they seem very low.

REP. ACKERT (8TH): I will -- I'll listen to more input on this and talk to the -- talk to the leadership of our Con just to see where this -- where this Bill came from. But thank you for your time and I appreciate your time being here. Thank you, Mr. Chairman.

SENATOR NEEDLEMAN (33RD): Thank you, Representative Ackert and thank you, Pat. I don't see anybody else's hand up so have a great day, be careful outside, if you're outside.

MR. MCDONELL: Thank you so much, everyone. Have a great day.

SENATOR NEEDLEMAN (33RD): Will.

MR. GINN: Next up, we have Howard Peterson, followed by Aaron Peterson.

SENATOR NEEDLEMAN (33RD): Howard Peterson. Is Howard Peterson still on? Can you let him in, Will?

MR. GINN: He is in currently. Let me just ask him to unmute.

MR. PETERSON: Thank you. Now, can you hear me.

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

MR. PETERSON: I don't know how to turn on so you can see me.

SENATOR NEEDLEMAN (33RD): No, it's all right.

MR. PETERSON: To the Committee on Energy and Technology, I want to thank you for your opportunity to provide testimony and my insights in the issues involved with advancing the mission to climate change in Connecticut, specifically towards House Bill 6412.

As background, this is the first time -- as a first-time person to testify, I want to tell you that I am a resident of Milford Connecticut. However, my expertise on the uses of biofuels to combat climate change come from my businesses that are headquartered in Massachusetts and New Hampshire. The liquid fuels distribution business Petersons Oil sells bioheat in Massachusetts, Connecticut, Rhode Island and New Hampshire. The biodiesel manufacturing business is located in New Hampshire.

I have an engineering degree from Rensselaer Polytechnic, and I am currently the president of our family business. I've had very -- various leadership positions in the liquid energy trade associations, and I am a voting member of the ASCMD02 Committee, which oversees the AFCMD396 standard for heating fuel, and the AFCMD6751 standard for biodiesel. Other than this hearing, well, I've advocated for the inclusion of low levels of biodiesel in Connecticut heating fuel supply the AFCM standard that includes B20 blends is now five years old, and the fuel sold and delivered in Connecticut will not challenge the limits of that standard until 2034. Likewise, in Rhode Island -- Rhode Island Bill H 5132 contemplates challenging the standard in 2030.

My experience in using biodiesel manufactured for waste oils dates from 2011. Our experience shows that high biodiesel blends work well with legacy equipment. Equipment manufactured in Connecticut has

a high -- very high compatibility with biodiesel blends at all levels. To achieve the high biodiesel blends for heating and manufacturing that will address the goal set by the Paris Accords, you as legislators need to provide incentives to propel Connecticut to the forefront.

My manufacturing plant in New Hampshire reopened without any government incentives in New Hampshire. But New Hampshire did not provide regulatory obstacles or delays in our plants. Massachusetts did provide incentives through the Massachusetts Advanced Portfolio Standard. This result in the sale the output of the plant to Massachusetts, a program which has seen participation grow to the point where it's about to maximize the program.

There is a closed biodiesel plant in Bridgeport, Connecticut, which our company entertained purchasing. But there was not a suitable business climate in Connecticut to pursue the venture, nor did Connecticut offer any incentives to offset the regulatory roadblocks to create additional incentives of clean energy production.

I would urge you to enact a TREC program rather than to continue to study the program to attract higher use of biodiesel on a voluntary basis. If you are to attract clean, low carbon fuels to Connecticut, you must provide incentives that are a pair -- at parity, if not equal or greater to the incentives offered from other states or countries for liquid fuels. Other heating products, including solar panels and heat pumps receive large incentives, but only perform some of the time and almost never in cold weather. The Far West and West are developing incentives for large renewable diesel plants that are to use a different technology.

As my plant is expanded, I have now reached a point where I can provide my distribution company with enough fuel to satisfy two levels of consumer demand. We sell a B20 blend to about a third of our

residential customer base. And we provide a B61 to about 60% of our residential customer base in Massachusetts. The incentives provided by Massachusetts have made it possible to distribute a liquid fuel that will meet your proposed 2035 standard today. Our field trials shall provide data for the next step up in the ASTM standards. And as well we select to a few -- we sell to a select few Connecticut consumers biodiesel blends that meet your 2035 goals today.

Connecticut is not an island. As you the -- bait TREC program, you need to be aware of the competition for low carbon fuels. I believe that every East Coast manufacturer of low carbon fuels is either selling fuel or contemplating selling fuels in other markets. I am currently waiting to see if Connecticut will create an incentive in the TREC program to provide the capital.

Our product -- our products are distributed to seven anaerobic digesters now, and as I pointed out, a herd of 800 cows can produce 300 kilowatts an hour of electricity at market wholesale electric rates. Our biodiesel BTU content is about 127,000 BTUs compared to USLD, which has a range of 125,000 to 235,000 BTUs. Our NOx emissions are lower than in petroleum, with field testing instruments used by almost every technician. Our field test instruments measure CO2, COO2, and NOx as standard tests and you can collect data locally to meet the DEEP questions.

MR. GINN: I'm sorry, Mr. Peterson. That's time, there.

MR. PETERSON: Yes, that's good. If you have any questions, then I'll submit the rest of my comments in writing.

SENATOR NEEDLEMAN (33RD): Thank you, Mr. Peterson. Does anybody have any questions for Howard? I don't see any hands raised so I just want to thank you for



coming today or for testifying today and have a nice day.

MR. PETERSON: Thank you.

MR. GINN: Thank you, Mr. Peterson. Up next, we have Sharon Peterson.

SENATOR NEEDLEMAN (33RD): Any relation?

MR. GINN: I don't know.

MS. PETERSON: Hello, I think you can hear me. Yes.

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

MS. PETERSON: There I got the video. It's a little tricky. Yes, there is a relation. We are husband and wife, full disclosure. Two separate companies, however. So, thank you by the way, both Chairman Arconti and Chairman Needleman for -- for having us and for my opportunity to speak also on behalf of HB 6412. Just as since you already mentioned, I'm writing or speaking from the perspective of a mid-sized family business in West Haven, Connecticut, Apple Oil Company, which is now in our 41st year of operation and over 60 years in business in Connecticut. We also sell -- we also build and sell residential homes throughout Connecticut.

So, for today though, I -- I want to say that we're -- we're both united in our effort to encourage and promote the use of biodiesel and other future low carbon fuels into the liquid fuel industry in Connecticut. I'm glad to see that you've included a bill that uses a lifecycle analysis approach which analyzes the environmental impact of energy from the raw material production to the end -- end-life use and through the -- the combustion and use through the consumer.

As you -- you might know that B100 has a carbon intensity rating of about 23, which is lower than

electric vehicles and lower than electricity produced from natural gas. To answer and I can't remember who asked about French fries, but I thought I'd bring Show-and-Tell. This is a little vial of PURA B100. As you can see, it's perfectly clear and I'll just do a quick smell test. Absolutely no odor -- odor and no French fries. But so just to answer that question. So, I do commend the Committee for including that.

Our industry has -- has reliably provided heat and hot water to consumers for over 100 years with same day response to emergencies and no-heat situations. Liquid fuels are storable and deliverable. They do not lose energy capacity during transit. No other fuel source has the ability to meet the heating needs in Connecticut consume -- consumers through all-weather conditions. Based on the dynamics of electricity generation, and its costs and the high cost of heat pumps, the vary -- the variability and function and supply for wind and solar, Connecticut needs to use liquid fuels with its already existing infrastructure to help meet the State's GHG and climate goals.

I'm skipping a little bit just so we can get to everything but I - my experience using credit programs, I have also bought and sold blends on the Federal Credit Program. So, I have a good understanding of the dynamic -- economic dynamics that need to be in place to bring the product to market. I've been a proponent of the use of the credit incentive program to -- to use -- for the use of biofuels. The mandated blend percentage only requires that whatever is sold be a certain blend rate. But it doesn't actually mandate that any product is sold at all, or that any product is supplied at all. And if we truly want to increase the volume of renewable fuel in the State and maintain that diversity of the liquid fuel industry, then we need a credit-based system because we are competing with the dynamics outside of our state. And the incentive program needs to be implemented to

encourage that supply to the state. Otherwise, it's going to go elsewhere, mandate or no. And currently, believe it or not, it is cost effective for supply to travel across the country to California, rather than be sold here in the East Coast.

So, I've advocated on behalf of the inclusion of biodiesel in the Class One Rex and I would encourage that we fully implement and maximize the use of biodiesel and other low carbon fuel blends. I recommend that this Committee include a requirement, that DEEP finish the process of implementing the TREC regulations in this HB 6412.

SENATOR NEEDLEMAN (33RD): Thank you, Sharon. I appreciate that somebody did come into my office once and drop one of those vials and said, you can probably drink it.

MS. PETERSON: You probably can. Although I don't know if I'd recommend it.

SENATOR NEEDLEMAN (33RD): I probably wouldn't.

MS. PETERSON: Yeah, I wish I had this one with me at the time, because as you can see, this is even a pure -- pure form. We're working to make it all this -- this clear, remove any impurities. And the other benefits, as you know is it takes used cooking oil out of the waste stream, which I know was a concern you mentioned earlier. And the byproducts from the production are used in the anaerobic digesters or can be sold for other purposes like making soap or making hand sanitizer.

SENATOR NEEDLEMAN (33RD): Is -- is there any sense of what the maximum amount of biodiesel that could be created from the waste stream? What -- what is that versus how much is being used -- how much oil is being used now, diesel fuel?

MS. PETERSON: You know, and I'm not an expert on the stats on that, but I know that there is some data

that we can handle a large percentage of the fuel by using the waste stream products. And I wouldn't want to make a guess on how much of that could be done that way. You know, and I, you know, I think perhaps some of the people following me might know the answer to that.

SENATOR NEEDLEMAN (33RD): I know that even with the most efficient heat pumps; extreme cold, they become very inefficient. So, I'm not sure that there isn't going to be a need for a gas or liquid fuel source long term till we get to a new technology, really.

MS. PETERSON: Absolutely. And I think that's a really important point. Just like the hybrid car serves a purpose, right. I think we have to preserve the liquid fuels industry as a pathway and see what comes next. But to shrink it to a point where it doesn't suffice in emergencies or other uses like a supplemental fuel source on a heat pump, is going to put us in a very, very dangerous position.

SENATOR NEEDLEMAN (33RD): Well, I -- I am concerned that as we move to electrifying everything, we become very vulnerable to what we know is not the most reliable source of -- I mean, it's reliable to a certain extent but there are conditions especially in Connecticut, with trees where we lose power and then you could lose power, transportation, communication, heat, every aspect of your -- of your life. And so, I said this before to DEEP, I'm concerned about it. It doesn't mean that we can't keep marching towards lower emissions. And these liquid fuels are certainly a bridgepoint, I don't know long-term. You know, it's one of those things where you have an industry that's been around for so long, and you hear from dozens of family businesses that have been three, four or five generations. It's just a -- it's a -- the biodiesel's approach is probably the long-term solution. But I don't know how long-term.

MS. PETERSON: Yeah, exactly and we don't know what's coming next as a renewed -- renewable diesel product, there are all sorts of carbon capture products that will come next. But they -- the liquid fuel delivery system is very, very efficient. And I think that's the thing we have to keep in mind when you talk about disruptions from tree foliage. I've talked on a national scale about disruptions from say hurricanes, where people are trying to get out of harm's way. And you know, if the -- if the power's out, they can't charge their car, if it was an electric car to get out of the way. So, we still have a long way to go before that is 100% viable option, if it ever is. I think we're going to find better ways to have a liquid fuel combination as we go forward. And I think that's why this Bill and combination, as I talked about with the credit program, is so important for achieving that pathway

SENATOR NEEDLEMAN (33RD): I don't disagree, and carbon capture may be part of the solution, if we can get to the point where we can really do that efficiently. It's one of the things that I think needs to be incentivized at a national or global level, we really need to work on that technology so. Anyway, I see Representative Gresko has his hand up.

REP. GRESKO (121ST): Thank you, Mr. Chair. I'm going to ask a similar question. Do you have customers asking for this? If so, maybe how many? How long have you been blending if you are blending? And did you need to retrofit anything like a filter or any additional equipment to accommodate their -- their furnace?

MR. PETERSON: Okay, so sort of a three-part question. The consumers have been slow to -- to know about biofuel, and to embrace it. And -- and of course, most heating choices, or most purchase choices, are based on, you know, cost effectiveness as well. But in the last several years, we're beginning to see there is definitely a very big interest in it. And I'll answer that in terms of our

Massachusetts company is as -- as Howard testified, selling varying bioblends, and giving the consumer a choice. And we're seeing 60% of the customers choosing the higher bent-- blend option, which is -- which is wonderful. It -- I don't do blending in my West Haven facility, we buy the fuel already blended. So -- so we don't do that, but we buy a blend rate, and then sell it to the customers -- so all the customers are getting the same. So, it depends on the infrastructure of the various company.

In terms of the technology aspect of it, we're using existing equipment. A couple of things without getting too -- too technical, right, the -- the color of the flame is different. So, the CAD cell doesn't always read the flame, you have to adjust the -- the way it reads that. And that may mean nothing to you, but this is a service technician issue, not an equipment issue. And they also adjust the airflow. And I'm repeating because I'm not a technician, right, but they adjust the airflow. So, this is a maintenance issue that can be resolved on the regularly scheduled maintenance visits, which we do; so that the -- the unit is working efficiently and burning the fuel as it should be.

So those are the main things that happen and it's not necessarily equipment. And I'll have one further note, I know that some of the manufacturers, Carlin in particular, are -- are producing new burners that are qualified to handle higher bioblends. They all can do it. But now they're specifically making them rated for the higher bioblends, which is great to see.

REP. GRESKO (121ST): Mr. Chairman, thank you.

REP. ARCONTI (109TH): Thanks, Representative. No other hands raised, so thank you for your testimony.

MS. PETERSON: Thank you very much.

MR. GINN: Thank you. So next up we're going to have Charles Rothenberger followed by Gerry Keegan.

MR. ROTHENBERGER: Hello Good afternoon, can you hear me.

REP. ARCONTI (109TH): Yeah, go ahead, Charles.

MR. ROTHENBERGER: Excellent. Well, thank you Senator Needleman, Representative Arconti and members of the Energy and Technology Committee. My name is Charles Rothenberger. I'm the climate and energy attorney at Save the Sound and I'm very happy to be here today to testify in strong support of SB 863, the Energy Efficiency Standards Bill.

I won't read my testimony, and hopefully not repeat a lot of what has been said. But the adoption of these efficiency standards really is an easy way to empower consumers and businesses to reduce their energy and water usage with a minimum of effort on their part. The savings are baked right into the product, requiring no special action or extra effort on the part of the consumer. And as other states restrict less efficient units from sale within their borders, states that don't adopt these updated standards really run the risk of becoming a de facto dumping ground for the worst performing products on the market, actually disadvantaging them, their residents. And this is a really important point, because we know, as a matter of fact that a growing number of states are adopting these standards. So that's a real consideration.

And I think it has been stated before across the various product categories included in the Bill, there are readily available and affordable models that meet the standards. These are not standards that are difficult to meet, or that require the development of new cutting-edge technology. This is not a technology forcing bill. It recognizes performance that's already out there available on the market across price points, while really raising

the floor a little bit in ensuring that the worst performing products are removed from the market, which from a consumer -- consumer perspective certainly makes a lot of sense. And so, adoption of these standards, as many states have already acknowledged by adopting them really represents a win-win for consumers. It's a win for the economy, a win for the environment.

And just to address maybe some of the comments that were raised before in the time that I have left. With respect to the computer standards, the standards in this Bill mirror the California standards. So, to the extent that that's become a de facto national standard, this language wouldn't change that one way or the other. But as a matter of fact, you know, we have heard that the California standards have not been uniformly adopted across the country. There are still products that aren't meeting the California standards, despite what a big share of the market they are. So, you know, working in concert with our neighbors, which is what this Bill really -- really does, ensures that, again, you know, Connecticut isn't being the destination for the worst performing -- worst performing products on the market. And with that I take any questions.

REP. ARCONTI (109TH): Thanks, Charles, I like the Save the Sound hat as well and I see a reference Representative Ackert has his hand up.

REP. ACKERT (8TH): Charles, thank you. Thank you for what you're doing. Thank you for your testimony today. I'm Representative Ackert. Just a follow-up, you know, the Katie Reilley talked about the computer screen and how they kind of do a base -- a base model. So instead of making computer screens that are of high energy use, low energy use; they go, "Okay, we're gonna make computer screens that are this energy use." So streamline around the, you know, the -- the base, rather than make, you know, multiple energy uses. What -- what appliance companies and others do the same? What's your



thinking, Connecticut being so small, I couldn't see a distribution or a warehouse that would say, "Okay, these are -- these ones can go to Connecticut, and then these ones can go to, you know, Massachusetts." Any thoughts on that?

MR. ROTHENBERG: So, I won't hold myself out as an expert on sort of the distribution system of manufacturers. And by the way, pleasure to see you, as always. You know, what I will say is that, you know, if sort of a hypothetical in your -- in your situation holds true, if, in fact, you know, all of the products are meeting this standard, having this language in Connecticut really won't impact that one way or the other. The fact is, you know, Connecticut if there is however, a difference, you know, we certainly don't want to be the target of lower-performing models, and we really are working in concert with our -- our neighboring states. New York has already adopted these standards. Massachusetts would have last year but they ran into a hiccup. So, they're refiling this year and moving forward with that. Vermont has. So, to the extent that distributions systems target regions of the country, yet, I mean, Connecticut really wants to be in lockstep with our surrounding states to ensure that, you know, we are -- we are getting the best deal for our -- for our residents, frankly.

I don't know if that was responsive to your question but --

REP. ACKERT (8TH): Yeah, I think you are right. The problem is, I think we bumped a year out of this anyways, too. So, it gets that [inaudible] in line. And maybe that's something I just, you know, just think that you know -- you know, we want to make sure that, you know, that I think it's more of a regional plan is what I think because New England is so small, to be honest, yeah. Well, we talked the other person that testified and talked about California being enormous. So as opposed to, you know, the whole, you know, our side of the States.

But so, I think we'll listen to the dialogue, you know, this, I always want to make sure that, you know, we're kind of working in concert with those around us. So, thank you, Charles. I appreciate that. You know, your work as a team, you know, and to get things you know, so that we're all working for the environment, but also our consumers, too. So, but thank you for being here and testifying.

MR. ROTHENBERGER: Thank you, I appreciate that and in case the point was missed, I mean, we should -- we should be clear that the standards in the Connecticut Bill mirror the standards in bills that other states have adopted and are adopting. So, you know, all the states recognize, individually, they can't have an impact on the market, but working in concert, and together, we can. Including with California, and that's really what the legislation tries to achieve. So, thank you.

REP. ARCONTI (109TH): Seeing -- seeing no one else with their hands raised. Thanks, Charles for your testimony.

MR. ROTHENBERGER: Thank you, Representative, my pleasure.

MR. GINN: Next up, we're going to have Gerry Kegan followed by Vincent Pace.

MR. KEEGAN: Co-chairs and Committee Members, Gerry Keegan with CTIA, the trade association for the wireless communications industry in opposition to Senate Bill 857, mandating backup power at cell sites.

Wireless providers probably respond to storms and other emergencies to ensure their networks are operational as quickly as possible. Providers use numerous strategies to prepare and respond to storms, including the placement of backup power, the use of portable generators and the use of cell sites that are portable.

CTIA and its members have also developed best practices which have enhanced coordination among providers to restore wireless service restoring emergencies. Wireless providers, though, need the flexibility to site backup power where feasible, which makes blanket mandates like the one in this Bill unworkable. For example, carriers and infrastructure providers place antennas in structures that have limited room and don't have the requisite space to install rows of heavy batteries, or large fuel burning generators. Many cell sites including those on rooftops and poles may not support the weight or size of backup generation equipment and may need to account for other structural issues.

Moreover, this legislation fails to recognize that carriers and infrastructure providers co-locate facilities whereby a single site may host several carriers and their equipment. It would be especially challenging for those sites to comply with this Bill's backup generation mandate, as sufficient power and separate equipment will likely be needed for all carriers operating on the co-located site. Any cell site modification that requires the addition of backup power equipment raises other complicated issues related to the lease terms between carriers and the facility site owners, including the permissible use of this equipment and its exact placement within the site. This outcome would require leases between carriers and site-owners to be renegotiated the possibility of which is far from certain.

Additionally, the siting council previously studied this issue, and found that for a number of legal and technical reasons, it was not feasible to implement backup power band-aids. For these reasons, we oppose this legislation and ask that you not move it forward. Thank you, Co-Chair.

REP. ARCONTI (109TH): Thanks, Gerry, for your testimony. Any questions from Committee Members? All right. just one quick question, Gerry. If some of these problems were addressed in the legislation, would CTIA possibly support it?

MR. KEEGAN: We believe that we need as carriers the flexibility to place backup power where it's appropriate and safe. We don't see that there could be amendments to address those issues that I presented. We really believe that we need that type of flexibility in order to place the equipment where we think it's appropriate. Now, all cell -- cell -- cell sites have some type of backup generation, whether it's battery or diesel fuel generation. And depending on the importance of the site, it could be four hours of battery backups versus 72 hours of fuel generator. But we believe that we really need that flexibility in order to place the equipment where it's appropriate.

REP. ARCONTI (109TH): Thank -- thanks, you. Thanks for that. All right, seeing no hands raised. Thanks for your testimony.

MR. GINN: Next up, we have Vincent Pace, followed by Stephen Sack.

MR. PACE: Good afternoon, Chairman Needleman, Chairman Arconti, Senator Formica, Representative Ferraro and other members of the Committee. My name is Vincent Pace. I'm an Assistant General Counsel for Eversource. And thank you very much for the chance to appear in front of you today. I appreciate the opportunity.

We've submitted a very detailed written testimony, I'll defer to that for details. I want to use this chance to very briefly summarize a few key points that we'd like to make. And the first is regarding Senate Bill 856, which is an ACT INCREASING REPRESENTATION ON THE ENERGY CONSERVATION MANAGEMENT BOARD. We support adding representatives from low-

income and also municipalities to that Board. We think their input will be helpful. It'll provide more diverse viewpoints, and also benefit the Board's decision-making process.

We also support Senate Bill 863 and that's an ACT CONCERNING ENERGY EFFICIENCY STANDARDS with the Bill because it updates appliance and efficiency standards, and we think it helps the State achieve its overall efficiency goals. The next bill I'd like to comment on is House Bill 6409. That's an ACT CONCERNING THE SOLICITATION OF BIOGAS INJECTION PROPOSALS FROM ANAEROBIC DIGESTION FACILITIES. And we support the potential use of biogas from anaerobic digestion because it helps reduce carbon emissions. We have identified just a few clarifying details we'd like you to respectfully consider in our written testimony.

The next bill I'd like to comment on is House Bill 6415. That's an ACT REQUIRING PURA TO ADOPT REGULATIONS FOR NATURAL BARRIER PRESERVATION AND MAINTENANCE BY ELECTRIC UTILITIES. And it's important to emphasize, we fully understand how important trees are to landowners. And we do try to work with them to achieve reasonable outcomes. But it's also important to recognize that we have to balance that with the reality that trees are the leading cause of power outages. What concerns us is, the Bill says, and I quote, "It requires the Preservation and Maintenance of existing natural barriers" And we think that ties PURA's hands, and we think it's very hard to reconcile that with the fact that we have to use targeted vegetation management to help reduce the likelihood of future power outages. And that's why we oppose that Bill. The final Bill I'd like to comment on is Senate Bill 864. And that's an ACT CONCERNING THE VALUATION OF CERTAIN PROPERTIES FOR MUNICIPAL PURCHASE. And we oppose it for -- for really two reasons. The first is, it harms our customers. It says that if we sell a substation to a municipality, the price is capped at \$100,000 dollars. It also caps the price on sales

of poles. And what happens is whenever we sell utility assets paid for by our customers, any gain we make on that sale goes back to customers with a credit. This Bill deprives customers of that value they've paid for all these years in their rates by capping the sale at below market value. And it also raises some very important legal issues that we talk about in our written testimony.

So that concludes my statement. I'm happy to take any questions if you have those for me.

REP. ARCONTI (109TH): Thank -- thanks, Vincent. Thanks for your expertise. As always, would you mind going over some of the changes in the biogas legislation you guys are proposing?

MR. PACE: Sure. And they're - they're very limited because we do support the concept overall. And we also do want to say that we do appreciate the fact that the current draft recognizes that the quality of the product would need to be suitable for injection to the natural gas system. We just like a little bit more language added to confirm that it actually will be acceptable, and it won't create problems for natural gas consumers.

Then the second change we'd like you to consider would be, can we ensure that PURA has the power to ensure that the cost of the program remains reasonable? And if over time, PURA concludes, it's not in the best interest of customers, they could curtail the size of the program to ensure that we balance the important carbon reduction goals in the program with billing impacts on customers.

REP. ARCONTI (109TH): Thanks, Vincent. Now in the - - in the biogas interconnection docket, can either of those be addressed in that docket? Or is it at an extra proceeding you think we may need to authorize PURA to do?

MR. PACE: We think that between the existing docket and also the docket contemplated by this Bill, if it passes, that would PURA the tools to be able to develop the right standards to ensure that the quality of the biogas being injected would be reasonable and compatible with our consumer's needs.

REP. ARCONTI (109TH): Okay, thanks. And the only other question is, I asked -- I asked you why. So, may as well ask you as well, is any comments on Senate Bill 855, the decoupling of PURA and DEEP?

MR. PACE: You know, we think that with a very important issue like that we respectfully defer to the judgment of this body and also the Executive Branch and will respect whatever approach that you implement on that important issue.

REP. ARCONTI (109TH): Okay, thank -- thank you. Any other members have questions. I see none. Thanks, Vincent.

MR. PACE: Thank you very much. Take care.

MR. GINN: Next up, we have Stephen Sack and then we're going to skip over Sam Lehr and go to Samantha Dynowski, for now.

MR. SACK: Thank you, can you all hear me?

REP. ARCONTI (109TH): Yep.

MR. SACK: All right. I like to thank this Committee for their hard work on this Bill, especially Senator Needleman, Representative Arconti. My name is Steven Sack, I own Sack Energy. We are an energy wholesaler here in Connecticut. I'm fifth generation in this family business. As our country and state moves towards to reduce greenhouse gas emissions with low or no emissions energy supply, the fuel oil heating dealers have moved towards this goal also. This Bill will allow Connecticut energy dealers to be part of

the solution at an extremely low cost to the residents in Connecticut.

Biodiesel can reduce greenhouse gas emissions by over 80% compared to conventional fuel, with minimal to no changes in the homeowner's current equipment. Our residents need more than one option to heat their homes. All electric heat pumps sound great on paper, the cost to install in an average house is over \$20,000 and more than twice as much to operate as you using -- a home using bioheat. I've attached a cost comparison from Eversource's website that illustrates heat pumps costs almost doubled operate versus bioheat. One major issue is with electric heat pump is the amount of heat it produces is not sufficient to keep the home warm in the winter. But the biggest issue is how will low and moderate income and renters afford to install electric heat pumps and then afford the extra cost to operate them. Today most landlords will not pay for energy audits and/or install the recommended changes to reduce energy usage in homes. This bill will ensure energy affordability and equity for all ratepayers by allowing residents to use bioheat that will not cost more than they're paying now and it will reduce the greenhouse gas emissions today, not years down the road.

Today, our State can't supply zero emissions electricity to -- to operate electric heat pumps and EVs without replacing 75% of our electric generation plants with solar windmills, and then triple the amount of generation needed to supply the additional electricity. Once the additional generation is installed, all of New England needs to replace the distribution system. When I asked DEEP about the cost and the timeframe for the grid upgrades needed, the response was they have not studied the cost or even asked the owners of the power lines, UI and Eversource, about the cost and the timeline to complete the project. The only answer that came back to us was, it will take 10 years to formulate a



plan, but they did not have any idea how long it will take to install this.

This Bill will allow the reduction of greenhouse gas emissions today and not decades later. A reduction of greenhouse gases today is worth more than 10 or 20 years down the road. The Department Consumer Protection has stated that they don't have the testing equipment or staffing resources to implement, they would need funding. Here I'll show you in the camera is a device that is a biodiesel testing device that we own. It takes about 30 seconds, put a couple drops of fuel on there and in about 30 seconds, it'll give you the results of how much biodiesel contents in the heating oil. They're very simple devices to use. I'm not a scientist and I was taught in less than three minutes how to operate this. It's portable. And our industry is willing to purchase a device for the Department Consumer Protection or they can use mine anytime that they need it at no cost.

As to the aspect of the need for staffing the Department, I don't quite understand why they would need more staff. They already have the staff there to go out and inspect the fuel that's being used under the current standards. All this is -- is just adding one more aspect to the standard the fuel with the biodiesel content.

Today, DEEP administers many clean energy credits programs. What's very interesting about it is that 75% of Connecticut's credits produced are from facilities located outside of Connecticut. These include windmills and hydro plants in Canada, solar panels on barns in northern Vermont, and other states as far south as Maryland. It seems that DEEP and DEEP's Privacy Protection doesn't have an issue with administering these out-of-state facilities where the power doesn't even come into Connecticut. Taxpayers are paying to administer these other state facilities with no return of funds or even in-state greenhouse gas emissions reductions. Most of the

heating oil dealers are local family businesses with the owners live and pay taxes in Connecticut, with a TREC bill for biodiesel, the proceeds from the sale of these credits would be taxed as income here in Connecticut.

I would also propose of adding a 5% fee on the sale of these clean energy credits when sold, that are issued by DEEP this could produce over \$20 million dollars a year to the state to administer these programs that would not cost the ratepayers a dime. Included -- I've included a separate letter detailing about the potential income from these 5% fee on all energy credits produced from Connecticut. The Sierra Club has also stated that biodiesel may increase NOx and is unlikely to reduce greenhouse gases. These statements have no scientific data to back them up and their statements are just false. An EPA report shows a reduction in Co2 emissions, particulate matter and other emissions. Biodiesel has the support of the American Lung Association. I've attached in my comments here a letter from them endorsing the product. California has a clean energy credit programs are worth up to \$2 dollars per gallon for renewable diesel that is made from the same feedstock as biodiesel. Massachusetts issues clean energy credits today for blending biodiesel and heating oil. With many other states incorporating biodiesel in their plants to reduce greenhouse gas emissions, why wouldn't Connecticut do the same?

Being a five-generation family business, I want to pass this company on to my children like my father did with me. This Bill will allow this to happen. It will allow low income and renters to use oil heat and biodiesel to reduce their greenhouse gas emissions today at no cost and ensuring energy, affordability and equity to all.

REP. ARCONTI (109TH): Thank you, Stephen, thank you for your testimony and thank you for your passion on this topic, it definitely comes through -- through

your testimony. Representative Gresko does have his hand up. So Representative Gresko.

REP. Gresko (121ST): Thank you, Mr. Chair. And, Steve, thanks for the testimony. And you included in the beginning of your testimony one of the points and questions I was going to relay, but I'm going to do it anyway. In that, you know, some of the criticism of this is that, idealistically, we should be moving towards complete carbon-free power and electricity generation. But if I'm a homeowner that maybe doesn't even have a natural gas pipeline down my street that I can have an option to go into, I'm still going to be using my -- my furnace that's been probably, you know, installed in the home when it was built. And this -- would this give me an option, even in with a furnace that's that old?

MR. SACK: Yes. The biodiesel, we've been blending biodiesel in our terminals for about 10 years now to our clients who deliver to houses. Old equipment -- new equipment, it's not having any issues on it. So, you know, I mean, at a certain point in time, it's nice to upgrade to have a more efficient system that's operating a little bit better. But it can be used in -- in -- in a 30-year-old furnace or boiler with no problem.

REP. Gresko (121ST): We've heard some of the testimony before you about how maybe a landlord or a landlord wouldn't -- is not interested in upgrading the -- the heat delivery system until he's forced or she's forced to do it with back against the wall and then subsequently, in areas around the State where funds are an issue, they're not looking to -- same situation. They're not looking to upgrade their -- their heat and cooling generation system until they absolutely have to. So, in the meantime, if they're interested in -- in lowering greenhouse gases, even lowering their bills this -- this is a -- is an option.

And then my other question and last question, I promise, is feedstock. If this was to go into effect, and even though it's in 5% increments over the years would feedstock be -- be an issue?

MR. SACK: Feedstock, I don't I -- don't believe feedstock's going to be an issue. You know, we have probably the largest production biodiesel production on the East Coast right here in Connecticut, New Haven, where I distribute a lot of the fuel up from that terminal where it's produced. I -- I mix it into the oil here in Connecticut, I ship it into Massachusetts for their program for clients. We also have the capabilities to import from other ports in Connecticut, where it's produced or from other countries. I don't see feedstock being an issue. You know, as in any free market society, if there is a demand, it will be there. You know, the issues we touch back to where you talked about the landlords, you know, they don't pay the heat bill usually. So, there's no incentive for a landlord to put a new heating system. And you know, I've talked to many people who rent houses, I sit on the [inaudible] for Clean Energy Commission as just a person I'm waiting to get on the Board. But it's pretty well-known fact that, you know, most landlords, they're not going to do the energy audits in the house, they're not going to insulate it, because they're not paying the electric bill. It's all -- it's only going to take away from their --their profitability on a rental property, where the tenant now can use a bioheat and get the greenhouse gas emissions today without the landlord putting up any money. In the future with the landlord, let's say that the boiler or the furnace needs to be replaced, you know, that can be done for, you know, \$5,000 to \$8,000 versus \$20,000 or \$30,000 or even more if there's no ductwork in the house, to put an electric heat pump. You know, the landlord's just not going to want to do that.

REP. Gresko, Joseph: Mr. Chair, thank you.

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

REP. FERRARO (117TH): Thank you, Mr. Chair. And I just have one question. And that question is around -- revolves around cost to the consumer. As you blend biodiesel in increasing increments of 5%, is there a formula in which the price changes per 5% to the consumer per gallon?

MR. SACK: Sure. There's -- there's a -- it's a -- it's a one for one, you take a percentage cost, and you average it together. But today, biodiesel is the same price as heating oil. So five, 10%, 20%, 30%, 40%, 50%, it's going to be the same price to the consumer, where we're running an electric heat pump, you're going to spend two to three times as much money to run the heat pump than you will for the bioheat. But you can get the greenhouse gas emissions today, versus we don't know when the -- you're going to get 100% or if we are actually going to be able to get 100% clean electricity.

REP. FERRARO (117TH): So, going forward, you don't see a -- a separation between the higher blends of biodiesel and the cost of traditional oil.

MR. SACK: I don't foresee it happening. I mean, I can't guarantee the future. I can look at the past and say that the last 10 years of us distributing the product, it's been either on par or less than heating oil over the last 10 years.

REP. FERRARO (117TH): And I appreciate it, thank you for your answer, and thank you, Mr. Chair.

MR. SACK: You're welcome.

REP. ARCONTI (109TH): There are no other questions at this time it looks like so thanks, Stephen, for your testimony.

MR. SACK: Thank you.

MR. GINN: All right, thank you very much. Next we have Samantha Dynowski followed by Matthew Mitchell.

MS. DYNOWSKI: Thank you, Representative Arconti, Senator Needleman, members of the Committee for the opportunity to testify today. My name is Sam Dynowski. I'm state director of Sierra Club Connecticut. As Commissioner Dykes noted earlier today, we are seeing a scary climate collapse that is a result of greenhouse gas emissions. A Harvard Report released last week shows that as a direct consequence of fossil fuels there are 8 million premature deaths worldwide annually, and that the Northeast United States is one of the hardest hit areas in the world. And research shows the impact of climate change and the burden of poor air quality from fossil fuel consumption are disproportionately felt by vulnerable populations.

The Sierra Club is committed to solving the climate crisis with just and equitable solutions that will result in a healthy world for everyone. Here in Connecticut, we are focused on advancing strategies to meet the decarbonization goals of our State's Global Warming Solution Act that mandates a reduction of greenhouse gas emissions below 2001 levels by 45% in 2030, and 80% in 2050. In that context, I offer testimony on behalf of our more than 40,000 members and supporters in Connecticut.

Sierra Club opposes HB 6409, the biogas injection bill. Chief among the reasons we oppose this proposal is that our gas distribution system is leaky. Leaks happen from pipes, to meters, to inside people's homes. Even new pipelines are shown to leak. Sierra Club investigated gas line leaks in Connecticut in 2019 and 2016 and found more gas leaks than were reported to PURA and that the leaks are pervasive and persistent. The results are similar to those found in Boston in a similar study in 2013 and are linked in our testimony. The 2019 study has been published in a scientific journal.

Methane leaking out of the pipelines is 87 times more potent than carbon in the atmosphere.

The other reason we oppose this proposal is that to meet the requirements of the Global Warming Solution Act, we have to transition off gas. As Representative Arconti noted earlier, as we move to electrify to meet our climate goals, there will be less use of the system and careful planning is needed to avoid foreseeable issues. Planning an orderly transition off the gas system now is the step we should be taking not adding new sources to it. Instead, biogas from anaerobic digester -- digesters should be used on-site and any excess gas, with planning can be directed to hard to electrify sectors such as industry, long distance transportation, aviation, and used as a longer-term energy storage to balance seasonal and wind -- wind and solar resources.

We also oppose Section E of HB 6412. The -- the low carbon fuel blend bill. New -- recently -- New York passed a major climate law that is similar to Connecticut's Global Warming Solution Act in its greenhouse gas reduction goals. And they've done modeling on their building sector, hired E3 to do the modeling for them and it's linked in our testimony, which showed that for buildings that to meet their goals, couldn't -- they couldn't do it in any other way beyond marginal or no on-site fuel use. So, we really urge that the comprehensive energy strategy should be focusing instead on how to quickly ramp up energy efficiency, rapid deployment of heat pumps and hot water and electric heat pump hot water heaters, and a planning process for an orderly retirement of the gas pipeline system. So, for those reasons, we oppose requiring the CES to include a low carbon fuel blend.

And lastly, we want to support SB 863 on the energy efficiency standards. This Bill will achieve significant environmental benefits by reducing

energy waste and saving consumers money. Thank you very much for the consideration of our testimony.

REP. ARCONTI (109TH): Thanks, Sam, and thanks for your testimony. Just had a clarifying question on the biogas testimony. It kind of sounded towards the end, you were supportive of the ADs in nature and more that -- that the fuel should be used -- I guess -- I think you mentioned on-site and for more local resources in the bio gas not ever did or injected into the natural gas pipeline distribution system. Is that a -- is that correct?

MS. DYNOWSKI: So, I think with careful planning, you know, we only have one non-farm anaerobic digester, and that with careful planning, there are certainly industries and applications that will be very hard to electrify and co-locating anaerobic digesters near these facilities could, you know, be a win-win strategy.

I think it's important to note we did in our testimony that, you know, we -- we follow -- we want to move towards kind of a zero-waste strategy for our waste disposal. So, we should first be doing composting itself before doing digestion. We don't want to just create something that's not environmentally suitable, but where anaerobic digestion is environmentally suitable that using the excess gas in to -- to do those types of things would be better. And I do -- I would note that it's my understanding that Quantum Biopower in Southington uses its gas onsite.

REP. ARCONTI (109TH): Okay, yeah, I don't want to -- I believe you're right on that. I don't want to comment in case I'm wrong. But you know, one of the -- you mentioned compost and you know, I, myself and Representative Ferraro were able to visit Quantum and one of the bi-products that they produce is, you know, some of the best natural compost that can be created out of the food waste product. You know, that's something I see as also a net win for the



environment replacing potentially, you know, getting more ADs up on farms and elsewhere, creating another product and replacing the chemically-induced fertilizer that farmers or even local gardeners use with much more environmentally-friendly compost that not only is better for the food regrow, but better for the soil and for regenerative agriculture in totality. So, yeah, not really a question just more of a -- my plug for good compost and regenerative agriculture.

MS. DYNOWSKI: Right, my backyard composter makes "fast compost" and it's great for the gardens. I would agree.

REP. ARCONTI (109TH): Representative Foster, I see your hand is up and then Representative Ferraro, as well's hand is up.

REP. FOSTER (57TH): Thank you so much for being here today. And for testifying. I've really struggled with -- I've read -- you've sent a lot of the promotional material to us a couple -- several weeks ago, I read it, read the article that you shared. I struggle with -- and I think this is the nature of a lot of the work we do in the Legislature in general, the idea of letting the perfect be the enemy of the good. And so, what I wonder, you know, I -- I'm thinking you -- I think that fiscally, for dairy farms, in particular, on-farm anaerobic digesters being allowed to hook up to the pipeline makes it more fiscally possible for them. And the environmental benefits for anaerobic digesters are beyond the mitigation of their greenhouse gas emissions, right. Like the runoff is different, the fertilizer products that they get down the road. So have in your recommendations, have you considered those environmental impacts as well, or you focusing more on emissions?

MS. DYNOWSKI: Yeah, so it's very concerning, the leaks in the pipeline system and to be putting new gas into that system that could potentially, you

know, just be leaking out. Those methane leaks are a big part of why gas is, you know, not -- it used to being often referred to as clean, but studies of missing leaks have shown that when you add leaks on top of the emissions from combustion, they're just as bad a fossil fuel as oil and coal. And so, it's -- it's almost impossible to have a system that doesn't leak. So, finding other ways to use that gas, whether it's creating electricity, and then selling the electricity, or some other way to use it, would -- is what we would like to see. And I -- you know, the co-location is, I think, more suitable, clearly for anaerobic digesters that are not on farms that are -- can be co-located near a hard to electrify industry where you can't just pick up a farm and move it near a manufacturing plant that needs the energy.

REP. FOSTER (57TH): So -- so what I -- what I hear you saying is that farms might be -- because they are more complicated answer than the biofuels that are coming from non-farm anaerobic digesters that --

MS. SACK: Yeah, but we could be thinking about energy storage and micro grids in the area of the farm. So, there's other -- there are other options, and I think we need to explore those.

REP. FOSTER (57TH): All right, thank you so much for answering my questions.

MS. SACK: You're welcome. Thank you.

REP. ARCONTI (109TH): Thank you, Representative. Anybody else have questions? Give it a minute. I see none. Thanks, Sam.

MS. DYNOWSKI: Thank you.

MR. GINN: Next, we have Matthew Mitchell and then we're going to have Sam Lehr or after that.

MR. MITCHELL: Hi, my name is Matthew Mitchell, President of Norbert E. Mitchell company located in Danbury, Connecticut. We are a delivered fuels provider and HVAC service company and a convenience store and food service operator. Our family business employs 214 Danbury and the Milford area residents. It was started by my grandfather in 1945. I'm here to speak in support of HB 6412, an ACT CONCERNING A LOW CARBON FUEL BLEND OF HEATING OIL AND THE ESTABLISHMENT OF A BIOHEAT ADVISORY BOARD. I'd like to thank Representative Arconti and the Committee for their work with the industry on this Bill and their support of local family-owned businesses and the environment.

Supporting this Bill means maintaining 1000s of local jobs that would be lost if the Connecticut economy was electrified. The Connecticut Department of Energy and Environmental Protection has a long-term goal to move a significant portion of Connecticut's motor vehicle and heating demand to electricity, which will reduce delivered fuels demand. Replacing delivered fuels demand with electricity will put delivered fuel companies out of business and their employees out of work. Our industry is mostly local family-owned businesses that pay local and State taxes and provide 1000s of jobs in Connecticut. This Bill allows our fuel to become part of the clean renewable energy future of Connecticut, which will help preserve that delivered fuel industry in Connecticut for decades to come and its jobs along with it.

Supporting this Bill means helping Connecticut meet its climate change goals. Moving heating oil to a 50% low carbon fuel blend will meet the State law that requires a 45% reduction in Co2. This Bill immediately responds to the needs of the residents of Connecticut for clean and reliable fuels today, instead of waiting years for wind and solar to come online. This is the most immediate measure that you can take in the heating sector to address climate

change, and the only pathway that delivers emission reductions today.

Supporting this Bill means helping Connecticut maintain diversity of clean energy sources and a strong delivered fuels industry, which is vital to Connecticut's long-term energy infrastructure. Connecticut needs a long-term reliable, clean alternative to electrification. Every piece of legislation that encourages electrification of the heating sector in the State of Connecticut, is irresponsible and makes our energy infrastructure weaker. Electric vehicles and electric heat pumps may appear to be the trendy path to meet Connecticut's climate change goals, but an energy infrastructure that puts more of its eggs in the electricity basket ignores the reality that, one, Connecticut has weather events that cause widespread power outages; and, two, electric grids are built for electricity demand, not heating and motor vehicle demand. If you move a significant portion of Connecticut's motor vehicle and heating demand to electricity, then you'll absolutely put delivered fuel companies like mine out of business. And if you thought Connecticut residents were angry in August when the power was out for more than a week, wait until there is nowhere to fuel their cars and not enough fuel companies left to fill the generator tanks that keep hospitals, homes and vital -- vital businesses going.

As we have all seen, right now residents in Texas are suffering through cold weather induced power outages because their heating sector is almost completely electrified, and the grid can't keep up. This is truly a terrible situation. And we all feel for the experience. And in a week, it'll be 60 degrees there. So they have a light at the end of the tunnel. And we'll be able to pick up the pieces from this horrible situation. If Connecticut electrifies its heating sector, we will have no such light. Extreme cold weather in the winter is not the exception here. It's the rule for about four months

a year. And we need a heating sector that is built to withstand a New England winter. Our industry has demonstrated every year for over 100 years that we are built to withstand our winters. Before Connecticut supports electrification policies, you need to clearly understand that those policies are aimed at removing our industry from the heating sector. And along with us the safety, reliability and experience that we have brought to Connecticut residents for over 100 years.

MR. GINN: 30 seconds remaining.

MR. MITCHELL: HB 6412 helps to accomplish our mutual goals of providing clean energy that is reliable. I thank you for your time and ask you to support HB 6412. I'll respond to any of your questions.

REP. ARCONTI (109TH): Thank you. Thanks, Matt. Thanks for your testimony. And you know, thanks, you know, for everything that your company does here and Danbury. You hit some important marks in your testimony and what this Committee always juggles with is, you know, responsibility to the environment, but also a reliable grid and keeping energy prices within reason for our ratepayers and protecting industries like yourself. I do see Representative Buckbee has a comment or question. I'll call on him.

REP. BUCKBEE (67TH): Thank you, Mr. Chair. And thank you, Matt, for your testimony. As I did before, I will take credit for Mitchell being kind of a greater New Milford area more than a Danbury company anyway. I get -- I get no response from our county when I say that I expect a chuckle, but I'm not getting that. Anyway, because he knows it's true.

So, Matt, thank you for your testimony. Yeah, I think a lot of us here, which would be nice -- to be 60 degrees next week as well, as we see more -- more snow on the way, but you bring up a really big point with generators, which are a huge part of living in

Connecticut. And I would like you, if you wouldn't mind, talk a little more about the -- the electric versus oil in Texas, too and how that reflects to us and what the numbers might be as far as the electric versus oil heat here.

MR. MITCHELL: I think there's -- it's a -- it's a good point to bring up and specifically as it relates to backup power. You know, when the power goes out, our company works around the clock delivering propane and diesel fuel to not just homes, but essential businesses, hospitals, schools, everything. And we're working 24 hours a day. In August, we didn't stop in order to keep up with the generator demand.

If you remove delivered fuels from the heating sector, or diminish them to any great deal, you're going to put companies in our industry out of business, who's going to be there to deliver those backup fuels? Who's gonna be there to be able to provide that backup security to everybody? It's a situation none of us want to be in. But until you have, I think Commissioner Dykes talked about the "grid of tomorrow" that Bill Gates talks about and everybody talks about, I think you've got to think long and hard about maybe building that grid of tomorrow first, before you move all the heating demand and motor vehicle demand on today's grid. Let's think about putting the -- not putting the cart before the horse and try to put the horse before the cart, and build the foundation first, before you try to put more demand on top of it. That's what's been difficult to understand through this process of trying to electrify and hearing that is such a buzzword, that you -- I think you'd want to get the grid to where it needs to be and have that grid of the future before you put the strain that -- that heating and -- and motor vehicle would put on that grid. Like I said, we -- I think this Bill is important because it helps an industry like ours stay in the mix long-term. Because we don't just serve the needs of normal every day, we serve

the backup needs. And if we're not here, your backup's not here.

REP. BUCKBEE (67TH): It's really well said, thank you for that. I think the impact on -- on small business is something we need to be very -- very careful around. Especially now when we've gone through the last year and a half or so, this impact on small business. I have two nephews who are living down in Texas who are still, well, one is kind of without heat, one of them lives next door to a medical facility. So, his grid is looking fine. For some reason he just doesn't have the water. But the other, thank God, they grew up in Pennsylvania so they know what cold is, and they can deal with that a little bit. But I think it's very important that we know what that backup is, and what our intentions are for a -- for a backup plan before we go, you know too far.

So, thank you for -- for your 100 plus years, you know, your business has done well in this area. It's great to hear from other, again, Western Connecticut people stepping up here. I'm loving this and love seeing that impact here, especially when some of them represent so much of the greatest town in USA. That's all I have to say. Thank you, Mr. Chairman. Thanks again for your testimony.

MR. MITCHELL: Thank you.

REP. ARCONTI (109TH): Thank you. Thanks, Representative. And I have made note of your gamebreak comments throughout the hearing and preparing legislation to annex New Milford from Western Connecticut. So, I look forward to that Public Hearing. Representative Ackert.

REP. ACKERT (8TH): Thank you, Mr. Chairman and thank you, Mr. Mitchell, for being here testifying and your years of service to your community. Question. Just full disclosure, I'm in a contracting field myself. I know quite a bit about the heat pump

systems. And I've heard a couple of people mention the heat pump systems. And so, in New England, typically they're not a viable option. They're -- the heat pump systems that we put in or the combination typically with an air-conditioning system like to split many units or something like that. And we also -- we typically need to have a better heating system like one that you guys provide or, you know, a hot air propane system or something along that line. Should -- do you think that the -- there's a competition because I know obviously, first of all, when we went to incentivize all the natural gas units and hurt those people that have, right, so your business is kind of getting it from both angles here. From the natural gas. Now we got the heat pump system. But then that typically means there may be a viable option down south for a full heating system, they just don't get that cold. So, is there a concern with your industry that these heat pump systems will -- will take over in some manner, the heating systems of your homes?

Matthew Mitchell: We on a -- on a kind of a day-to-day basis, we see the limitations of -- of electric heat pumps. Of course, absolutely, there's a concern. It's, you know, one of the reasons that I'm here and a lot of us are testifying is because heat pump -- a heat pump system is -- has, you know, it's electric-operated system, you know, it's -- it's based on electricity. And when it gets, you know, all of them have different ratings, but in general, when they get into the, you know, into the -- into the low 20's, and teens, they start to become less effective. And then when they get -- when you get into the single digits, they're ineffective. So, you know, then -- then you're -- you're kind of in a -- in a -- in a scenario where you have to have a backup system where you're using electricity. And if you can envision an entire state heating with electric, even if you had a chunk of that state using heat pump that had some level of efficiency down into the 20s, you all live in Connecticut, or most of you do, you certainly know, we spend the



majority of December, January, February, and even March in the in the 20s and teens. So not unusual, it's not the exception here.

So like you said, heat pumps are a tough solution here in Connecticut. So they -- they have their uses, but by and large the customers we serve, it's -- it's, it's not really a practical solution for them, besides the cost of actually putting them in.

REP. ACKERT (8TH): I've just heard some elevated numbers today, but and I know that it's a \$10,000 at least investment in that, but they're just typically for what I understand but, you know, I know what their limitations are and so do you. Your systems obviously can heat much lower temperatures. So, you know, hopefully, that people will take on making that option when they're thinking about it, unless their house is tiny or something. But anyways, I want to thank you for your testimony and, you know, look forward to continue to work on this and helping your industry out.

MR. MITCHELL: Thank you.

REP. ARCONTI (109TH): I don't see anybody else with questions. Thanks -- thanks, Matt for your testimony.

MR. MITCHELL: Thank you, Representative Arconti.

MR. GINN: Next up, we have Sam Lehr and that's going to be followed by Joe.

MR. LEHR: Hi. Good afternoon. My name is Sam Lehr, Policy Manager with the RNG Coalition. Our organization represents the RNG industry in the United States and Canada, bringing together members from across the RNG supply chain, including project developers, utilities, financiers and academic institutions, among others, to advocate for the sustainable development and use of renewable natural gas.

We appreciate the Energy and Technology Committee's timeliness and prudence in the introduction of RB 6409, which will allow for the implementation of an important step toward Connecticut's decarbonization goals. The use of anaerobic digestion will be necessary in tandem with other waste management strategies in order to deal with our large and growing amount of organic waste in a responsible manner -- manner, sorry, which reduces carbon emissions and can help reconcile other environmental impacts related to the waste management process.

In turn using this biogenic methane to produce renewable natural gas as envisioned by the Bill allows for additional carbon reductions in the energy sector. RNG is a well-established existing technology which has experienced significant growth in recent years due to its recognition as an important greenhouse gas reduction strategy. It's important to note that organic waste contains carbon, which is part of the near-term carbon cycle. Meaning that all Co2 emissions from RNG are carbon neutral or biogenic. This is a well-studied concept substantiated by for example greenhouse gas counting principles from the World Resources Institute, among others. Furthermore, there's a massive climate benefit where facilities capture methane that was previously admitted directly to the atmosphere. As is the case when food waste is diverted to a more efficient anaerobic digestion system, often making the fuel carbon negative on a lifecycle basis, in other words, more beneficial than carbon neutral. This concept embodies the idea of a circular economy and by utilizing Connecticut's existing gas distribution system will help to minimize the impact of large-scale infrastructure build-out and material extraction required to reach 100% renewable energy system.

Importantly, RB 649 (sic) will give DEEP the authority to offer RNG Purchase Agreements in line with other stated goals as outlined in the recently

released draft integrated resources plan. Subsequently, allowing DEEP to direct Connecticut's natural gas companies to procure this RNG will create a clear market for Connecticut circularize their waste management system and reduce the consumption of fossil-derived natural gas effectively addressing to greenhouse gas emission categories at once in pursuit of carbon neutrality. Furthermore, allowing these costs to be rate-based, is appropriate as reflected by the greenhouse gas and other potential environmental benefits afforded to ratepayers through the development and use of RNG.

Our coalition strongly supports this legislation, and again, appreciates the Committee's attention these matters as a crucial piece of Connecticut's greenhouse gas reduction strategy. We look forward to future engagement, and we'll be following up with some written comments in the near future. Thanks for your time.

REP. ARCONTI (109TH): Thanks Sam, thanks for your testimony any questions from Committee members. I see none. I look forward to working with you and your organization on this Bill going forward.

MR. LEHR: Thanks.

MR. GINN: All right, thank you. Next we have Joe and then followed by John Erlingheuser.

MR. UGLIETTO: Thank you. My name is Joe Uglietto and I'm the President at Diversified Energy Specialists which is a renewable energy consulting and environmental markets trading company in Massachusetts. I serve as an aggregation Massachusetts alternative portfolio standard, which is the thermal portfolio standard in Massachusetts, and I represent clients in many renewable thermal technologies, including air source heat pumps, ground source heat pumps, biofuels, biomass, and solar-thermal technologies.

I'd like to voice support for Bill 6412 and believe it's a step in the correct direction for environmental justice populations in Connecticut residents that are currently in climate poverty, meaning they spend more than 10% of their income on energy needs. Connecticut DEEP in their IOP record, chose not to recommend the thermal portfolio standard that incentivized biodiesel, and instead believe the only path to Connecticut gets to 2030 and 2050 greenhouse gas reduction goals is through electrifying all residences and buildings. I believe the IRP as written is a harmful and dangerous document to environmental justice populations in Connecticut. I urge anyone listening who's interested in the IRP to read the comments that Riverside Energy Specialists submitted. It shows how Connecticut DEEP misrepresented information on air source heat pumps into central grid load additions from electrifying the building sector.

The costs of air source heat pumps are extremely high and low- and middle-income residents in Connecticut are not able to afford them. The installation of air source heat pumps will occur in higher-income communities. And the already large energy affordability gap in Connecticut will widen as high-income communities benefit from cleaner air qualities and environmental justice populations will have to pay a higher cost of electricity due to the added winter grid load. Yet the only benefits from these air source heat pumps will be where they're installed in the higher-income communities.

Despite the electrify everything narrative by northeast states, air source heat pump penetration has not reached a significant number of households as of yet. This is because the large upfront capital investment costs that's required to install an air source heat pump system and air source heat pumps need a supplementary source of heat in almost all cases in the Northeast, and air source heat pumps can't keep Connecticut residents warm on cold winter

days. While Texas has been brought up a number of times throughout the meeting today already, I think one important reason I would consider what's happening in Texas is happening is because 61.1% of all households in Texas use electricity for heat. Turning on air source heat pump systems in 61% of households caused the electric demand to reach a three year high as a winter peak in the wholesale cost of electricity to go all the way to \$9,000 per megawatt.

This is the first situation we've really been able to look at and study where the majority of the thermal building sector is tied to the electric grid. Electrifying the thermal sector can significantly increase electricity prices, increase greenhouse gas emissions from electricity, and will require nearly double the amount of renewable electricity to reach Connecticut's 100% clean energy grid goal of 2040.

In addition, many fields studies including the 2020 ISO New England Heating Electrification Report indicate that state governments are using taxpayer money to incentivize and grant rebates for the residential installation of air source heat pump systems, but instead of them being used for heat, they're actually only being used for air-conditioners in the summer, and a supplementary source of heat in the winter. Biodiesel or heating oil is being used in almost 40% of Connecticut households. And biodiesel can reduce greenhouse gas emissions in all of those have little to no cost to the end-user and no system modifications and equipment modifications. There's a disproportionate number of fossil fuel systems in low-income communities. And by putting into place a TRPS program and a mandate for biodiesel, it will immediately decrease the greenhouse gas emissions of low-income communities and support these communities unlike what the AARP is doing as written. so I just wanted to support the mandates of the IRP program and Bill 6412. Thank you.

REP. ARCONTI (109TH): Thanks, Joe. Any questions from committee members? Seeing none, thanks for your testimony. Looking forward to working with you guys on the Bill.

MR. LEHR: Thank you.

MR. GINN: Thank you very much, next we have John Erlingheuser and then Christopher Fisher after that.

MR. ERLINGHEUSER: Good afternoon, can you hear me okay? Okay. All right. Thank you, Representative Arconti, Chairman Arconti, Chairman Needleman and Ranking Members Formica and Ferraro, and members of the Committee. My name is John Erlingheuser, I'm the advocacy and Community Outreach Director for AARP in Connecticut. And I'm here today, I'm representing our nearly 600,000 members in Connecticut and close to 40 million nationwide. I do want to just briefly, I'm not going to read my testimony, I've submitted it in writing, but I will just highlight four bills that we -- we did testify on and then give you the 10,000 foot view on each of them. And I'll start with the one of the four bills that we oppose, which was 6411, an ACT MOVING THE CONSUMER -- CONSUMER COUNCIL'S OFFICE WITHIN THE OFFICE OF THE ATTORNEY GENERAL.

I'll just say that AARP nationally points to the Connecticut model for consumer councils and consumer advocates before utilities to be the model that other states, few states that don't have one, adopt. And that's because of its independence. And we consider an office to be independent. If it's operates independently of other government entities, including the Legislature, regulatory commissions and any other government agency. The head of the office can have a term and cannot be ruled for cause they - They're designated to represent consumer interests before utility boards, and that they can appeal decisions to state and federal courts. Connecticut meets all those criterion. And any

changes would -- would jeopardize what we would consider to be a truly independent consumer Council.

On the three pieces of legislation that we support. We certainly support the Energy Efficiency Standards, Bill 863 for all the reasons that have been said today, I won't repeat those. I will say we -- we strongly support 6410 increasing the penalty for violations associated with the No-sales-solicitation call listing. We have a -- two programs in Connecticut One is called the Fraud Watch Network. Another one is "What I Need to Know About My Electric Choices", where folks go out and educate folks on how to make a determination about whether or not choosing an electric supplier is right for them. And in both of those programs our volunteers, one of the biggest things that they frequently get are violations of the Do Not Call list. And so, you know, anything we can do to continue to crack down on that would be very -- very helpful.

And then the one I want to focus a little bit more on is the Decoupling. I know, maybe the two utilities wouldn't go for it on 855. But what I will say is that we strongly support decoupling of PURA from DEEP. We didn't support that back in 2011, when it was part of a larger energy bill that we did support because of many of the other things that it included, including the creation of the new procurement process that significantly brought down the cost of standard service. But almost immediately from when the -- its inception. And I will state for the record, AARP has no issues with the current commissioners of PURA or the leadership at DEEP. But that's not to say there haven't been problems before this group of folks. And that that can't be problems after this group of folks.

So, I want to make it clear, you know, we can't make a decision based on what's happening right at this moment in time, because there have been issues in the past. And in the beginning, there was almost an

immediate issue with the head -- first head of DEEP when it came to a proposal from --.

MR. GINN: 30 seconds remaining.

MR. ERLINGHEUSER: Yep. Okay. When it came to a proposal from Eversource and putting in a new metering technology and the Commissioner of DEEP intervening, and in 2015, the entire leadership, all three members of DEEP -- excuse me -- PURA, basically and you could read the news account said, there's constant interference. Now, that's -- that's once again prior to any of the leadership at DEEP now. And they laid out in detail all of the issues. And this is in 2015, that existed with DEEP interference in PURA's ability to operate. And so, I think it's imperative that -- and by the way -- there are no other configurations like this, there may be some similar things, but nothing is quite like the arrangement we have in Connecticut. So, I would strongly support the efforts to decouple PURA from DEEP. And with that, I'll open it up if anybody has any questions on any of the four bills or anything else, for that matter.

REP. ARCONTI (109TH): Yeah. Thanks, John, for your testimony. As always, I [inaudible] this Committee. In your written testimony, did you -- did you or could you provide, you know -- you know, links to those two instances in 2011?

MR. ERLINGHEUSER: You know -- you know, I have them pulled up on my computer now. I did not put them into the testimony, but I'd be happy to share them with the Committee. But, you know, the incidents in 2011, it was, you know, there was a proceeding because we had already had new meters in the Eversource territory. And then they were petitioning to get smart meters to go to time of use rates, which, by the way, something we mandatorily we oppose, if it's a mandatory issue. And, you know, the head of DEEP intervened at that time, Commissioner ESTY to say, "Wait a minute, don't make



a decision. We want to let our policy bureau decide first." And, you know, by the way, as it relates to savings, a lot of the savings came from going from five DPC commissioners to three, if I'm not mistaken, you guys have already authorized the Governor to go back to five commissioners. I know, he hasn't done it as of yet. But, you know, right now, they're still housed in New Britain, where the DPUC was housed. I was, I mean, there's, you know, I -- I don't necessarily buy that there's significant savings for ratepayers in, you know, DEEP oversight. It really had more to do with them putting more of an influence over energy policy, you know, within regulation, as opposed to cost savings. But anyway, I'll be happy to share that stuff with you.

REP. ARCONTI (109TH): If you could maybe send that to our Clerk, Will, and then Will can disseminate it to the Committee. And then, and the three to five, you know, we did but that was at the request of the Governor. But any -- any other members of the Committee have questions for John? Seeing none, thanks, John.

MR. ERLINGHEUSER: Right -- right going to the end of the day. Thanks, guys.

MR. GINN: Thank you. Next, we have Christopher Fisher, followed by David Sousa.

MR. FISHER: Good afternoon, Chairman Needleman, Chairman Arconti and members of the Committee. I'm Attorney, Chris Fisher. I've practiced law in the State of Connecticut for over 25 years now. I'm here on behalf of WIA the National Wireless Infrastructure Association. WIA's members include tower companies, wireless carriers, and the people who design, build and operate America's wireless infrastructure.

WIA is committed to wireless connectivity and network resiliency and appreciates this opportunity to testify today in opposition to Senate Bill 857

and a backup power mandate at cell sites. Wireless Network resiliency and planning and infrastructure hardening involves complex interconnected matters with numerous stakeholders. And there's no simple solution when it comes to continuity of services. That, in fact, is something that was looked at by the two-storm panel by the prior Malloy Administration back in the early 2011, 2012 timeframe. And the legislature in fact adopted an act called the Emergency Preparedness Act in 2012. As part of that particular Act, Section 8, charged the siting council with undertaking a feasibility study to look at backup power and cell sites enquire across the entire state. The siting council did that, it's Docket 432. Their information is actually still readily available on their website and included a lot of testimony from various stakeholders, the wireless companies themselves, agencies and looking at the issues of backup power and resiliency planning. And one of the things that the siting council concluded that there were several legal, practical, technical, even environmental issues that would be barriers potentially to a full state-wide mandate on a backup power requirement at cell sites.

Today those findings are still valid. They typically include and center around four different particular areas. One of which is state and local environmental zoning and building code permitting requirements. Many of the agencies that regulate environmental quality, building code safety and structural requirements have requirements related to whether it's rooftops or cell sites and tower locations that could be, in some cases are, barriers to actual deployment of a generator or something of that nature. They're not intended to be barriers, but they can as applied given the nature of circumstances our industry faces on our sites across the State.

Another area where we can run into particular issues with deployment, particularly of backup power

generators and fixed locations are noise regulations. Some of those regulations when we look at residential rooftops where we may have macrosite facilities, they may be a challenge even with state-of-the-art noise reduction techniques to meet a local code with respect to noise associated with a generator. There are also many instances across the State whether it's at a tower site location, or a rooftop situation where there are physical constraints, or even property owner constraints. Our industry typically deploys infrastructure on private property. And there are relationships we maintain typically by lease with landlords, those in certain physical constraints can actually be barriers to deployment of backup power generation at cell sites.

And the fourth area is, just from a federal perspective, Congress has really reserved this area to the FCC for its exclusive jurisdiction and regulation. And something the FCC is continually looking at. And they take a native approach. That's really what the best practices, engagement with the industry and all the different stakeholders. So that's something also to be considerate of.

One of the things I actually wanted to focus on in terms of testimony here today was just where we've come since that period of time when the State last looked at this. The siting Council, PURA, local agencies, I appeared before them routinely with wireless infrastructure. They're all very engaged. There is a legislative enactment, under the prior Bill and Act, it's 16-50LL of the statutes, and annually, the wireless carriers actually report to the sitting Council on all of their improvements. Now, this could be new technical upgrades to battery deployment and capacity. It could be retrofits of existing sites with new fixed generation capability, and at new tower sites --

MR. GINN: 30 seconds remaining.

MR. FISHER: Thank you, and certainly at new sites, the Siting Council is very focused on this issue. And we have evolved over the last several years, I can't really remember a docket where we haven't deployed a fixed generator on a cell site to provide this kind of capacity when it comes to network resiliency. They also look at hardening of the utilities serving the site undergrounding requirements. So this is an area where the industry and the agencies certainly in the state are collaborating actively. And I think it's a certainly an area where we continue to improve. I'd be happy to answer questions or give you further perspectives.

REP. ARCONTI (109TH): Thanks, Chris. Representative Ackert.

REP. ACKERT (8TH): Thank you, Mr. Fisher, for being here. Just a quick -- new cell facilities going in, are most of those plans with some type of backup energy at today's standards?

MR. FISHER: Yes, they are. There's two typical areas. So, at a cell site that you might see a new tower site, for example, the Siting Council, you will see all the carriers deploy some form of battery backup generation. The duration at a site like that typically the testimony before the siting Council is eight hours. All of those sites currently are being deployed with generators, as well. Some of those generators are proprietary to the carrier or in some cases, there's been an industry developing for share generation. Those are typically propane or diesel or natural gas if it's available. And those have runtimes that far exceed this standard. They're in the 48-to-72-hour period of time.

REP. ACKERT (8TH): You mentioned upgrades, that they do reports on upgrades. Are they -- are they -- as they make upgrades, do they also look at incorporating some type of battery or -- or, well,

probably battery unless it's got site availability, put a ground mount generator, right?

MR. FISHER: Yeah, so they look at both and especially in the case of rooftop sites where fixed generators may not be practical or feasible. The battery technology continues to improve. So there's generally a capital plan that each carrier has to go back over a period of years, pull out old batteries, put new ones in which are more efficacious. And then at cell sites, there's actually been programming and the Siting Council has some public data this where the industry is going back to tower sites that were built in prior years and deploying generators because it's part of their -- their quality of service offering and how they actually compete amongst each other. So there are in fact, many instances of retrofits at cell sites with fixed generation.

REP. ACKERT (8TH): Right. Thank you, Mr. Fisher. Thank you, Mr. Chairman.

REP. ARCONTI (109TH): Thanks Representative. Any other questions from committee members? Seeing none, thanks for your testimony, Chris.

MR. FISHER: Thank you.

REP. ARCONTI (109TH): Muted, Will.

MR. GINN: Oh, I'm sorry about that. Then I said next up, we have David Sousa followed by Jacob Cassady.

MR. SOUSA: Good afternoon, Representative Arconti and Arconti, I'm sorry, and members of the Committee. My name is David Sousa. I'm 38 years old, a Connecticut S1 unlimited heating, cooling and piping contractor, and a third-generation business owner of J&A Waterville oil Service Incorporated located in Naugatuck, Connecticut. Our company has been in business since 1953. I'm a graduate of the

University of Connecticut School of Business with a Bachelor of Science in 2004.

My purpose for testifying in favor and in support of House Bill 6412, sorry, is that I have conducted a test when I ran my home located in Prospect, Connecticut, on B99 fuel in conventional heating oil equipment. This test was dreamed up by myself with two simple and humble questions in mind. One, do my business, my family and I have a future in this business, industry and State of Connecticut? And two, can I reliably provide comfort for my customer base? The test was conducted in affiliation with Connecticut Energy Marketers Association, and engineers from the National Oilheat Research Alliance also known as NORA.

The reason for my test significance is that, to my knowledge, there have not been many if any studies of homes running on 100% biofuel, while utilizing conventional oil equipment. This fuel was never intended to be run in the -- in equipment designed for a different fuel, much less 30 years ahead of schedule. Prior to my test, no one was sure if it was possible to accomplish this or not. My test was conducted using the B99 fuel produced by Kolmar or American Green Fuels located right in New Haven, Connecticut. I used a conventional triple pass style boiler in conjunction with a Carlin burner which is manufactured in North haven Connecticut by Carlin combustion technology. Do you see a theme developing? It's Connecticut.

I'm happy to say that my test was a success with respect to both questions. I was able to reliably run my heat and hot water off my boiler and ensure that I have a future in my business, industry and the State of Connecticut. My business is ready to meet the carbon reduction goals of the future with less carbon intensive fuel -- less carbon-intense fuel. My employees, my customer base and my family can rest easier because I have a solution to their

comfort and helping to create a greener, more sustainable planet.

This is a -- this is the reason or lifecycle analysis of carbon is so important. My industry does not want to be frowned upon or mired for our entire existence. I for one took the bull by the horns and tried to do something about it because I want to be remembered as a man of value and principle, not a villain.

I also want to provide a cheaper, more comfortable future for my customers and family than any retrofit air source heat pump can provide. Take it from someone who has an air source heat pump and has tried to run it in cold temperatures. Me. Anyone, even out-of-state can do this to their heating oil equipment with the help of a competent, licensed liquid fuels dealer or a contractor. I have two beautiful daughters. One is four, one is seven. Before conducting this test, it would have been extremely difficult to look them in the eyes at the dinner table and feel like I was making a positive difference in this world with respect to air pollution and sustainability for their respective futures. Essentially making Connecticut and the world better places than I found them. It is wonderful to be able to sit down and tell them -- with them and say with confidence that I made a positive difference and that they may be able to run a fuel company in Connecticut someday, if they wish.

It is wonderfully refreshing to be able to sit down with you today and agree on something, instead of fighting you on an on the topic at hand. The best part of all of this -- all of this, is that everyone on the planet can benefit from this small test that I conducted in my own home, right here in Connecticut.

With that, I'll open it up to any questions, and I'll do my best to answer them.

REP. ARCONTI (109TH): Thanks Dave and David and thanks for your testimony today. And are there any questions from Committee members? I don't see any hands up. So thanks for your testimony and looking forward to working with the on the bill.

MR. SOUSA: Thank you.

MR. GINN: Thank you very much. Next, we have Jacob Cassady, followed by Cary Lynch.

MR. CASSADY: Great, thank You. And good afternoon, Mr. Chair, members of the Committee. As Will just mentioned, my name is Jacob Cassady. I'm the director of government relations for the Association of Home Appliance Manufacturers. AHAM has over 150 member companies that manufacture major portable flow care appliances as well as their suppliers. In terms of our reach, about 95% of appliances shipped for sale in the United States are produced by AHAM members.

I did provide my full testimony in advance of this hearing. Just want to talk on the little points. I know it's late in the day. I'm here, because AHAM opposes SB 863, the efficiency bill. And really, it's largely because of its inclusion of air cleaners, which would eliminate approximately 60% of air cleaners, air purifiers from Connecticut shelves, leaving consumers with fewer options at higher costs, which could put them out of reach for lower income residents. This at a time when demand for these products is at an all-time high. Part of this is because of and largely a driver of the COVID-19 pandemic consumers desire to purify their air, especially in the home setting as we're spending more and more time and in there -- in our homes.

This cost was very well-articulated by Chairman Needleman earlier in this hearing. But I think one of the key things that I want this Committee -- I would like the Committee to consider and really take



away is, this isn't about energy. This is about human health. And when you put it into that perspective, whatever savings may have been suggested for a product that meets this -- this new standard, it truly may not come out as a human health benefit. So, when we talk about standards, this legislation also completely undercuts the very purpose of the Energy Star Program, which has successfully created a label designating the more efficient products in the marketplace. Energy Star was never meant to be a mandatory minimum standard. And again, it is to inform consumers of the more energy efficient products available.

Finally, the Legislation calls for Connecticut DEEP to adopt rules on, you know, furthering energy standards and other products. Again, when it comes to air cleaners, this is better put to indoor health experts and departments that handle that as the state of California has done. As well as we must consider the costs that go into testing and updating standards that -- that DEEP would have to endure to update these. Thank you for consideration of these comments, and I'm happy to take any questions.

REP. ARCONTI (109TH): Thanks, Jacob. Any questions from Committee members? Seeing none, thanks for your testimony.

MR. GINN: Thank you very much. Next up we have Cary Lynch followed by Ms. Pearson.

MS. LYNCH: Hello. I am Cary Lynch. I am the Climate and Energy Policy Manager at the Nature Conservancy. Thank you for the opportunity to present testimony today. We would first like to express concern about both Senate Bill 855, an ACT CONCERNING THE DECOUPLING OF PUBLIC UTILITIES REGULATORY AUTHORITY AND DEEP. We have three main concerns with this Bill.

Our first concern is that this Bill might undermine the intent of the 2011 Public Act 1180, which was

created to enhance energy planning efforts while reducing spending across three agencies. Through this Act, DEEP was tasked with creating an energy policy while PURA was to regulate policy DEEP created in an efficient, coordinated manner. By decoupling PURA from DEEP, we weaken the State's efforts to effectively manage our energy and environmental needs.

Our second concern is that this Bill may increase cost to the state by streamlining -- streamlining the functions once done under three separate departments, the State has reduced redundancies and increased efficiencies in State spending, achieving policy goals with minimum resources should be emphasized and encouraged. Decoupling would not likely lead to a decrease in utility cost to ratepayers and would in fact likely lead to an increase in costs, more of which I could discuss later.

Our third concern is that this Bill could misalign environmental conservation and regulation efforts with energy planning. Sitting PURA within the structure of DEEP allows for regulatory practices to be optimally aligned with DEEP's evolving energy policies. It also offers the means for both DEEP and PURA to be reactive and flexible in a timely manner. If decoupling were to happen, it is uncertain how the current channels of communication and cooperation would change. Given the importance and urgency of planning for 100% zero carbon energy future, decoupling has the potential to adversely affect current and future policy that minimizes risk and costs to Connecticut ratepayers.

We would also like to express our -- our support of Senate Bill 863, an ACT CONCERNING ENERGY EFFICIENCY STANDARDS. This Bill sets up-to-date efficiency standards for selected residential and commercial products, some of which were put on indefinite hold by the prior federal administration. Energy Efficiency is really a low-cost resource for

achieving emission reductions, as well as reducing costs for ratepayers. Meeting our future emission and renewable energy targets will be incredibly difficult, without actions to reduce our energy consumption through more stringent energy efficiency standards.

And as others have stated, this Bill would better align our efficiency standards with our surrounding states, as well as many other states in the nation. A stronger and more uniform efficiency standards, not only aids and Connecticut's goal to decrease energy consumption, but it simplifies the implementation and manufacturing procedures for businesses in Connecticut -- And I guess with that, I'd like to thank you for the opportunity to present testimony on these bills. Thank you.

REP. ARCONTI (109TH): Thanks, Cary, and sorry about that. Sorry about that interruption. I see Representative Mushinsky has a hand up for a question. So, go ahead Representative Mushinsky.

REP. MUSHINSKY (85TH): Oh, thank you, Chairman. Cary, I want to thank you for commenting on this Bill. I've been weighing the pros and cons of separating PURA from DEEP for months now, and I'm coming down on your side of the fence on this, I think. I know in the past, there have been conflicts between the two agencies and it has delayed progress on moving us toward Clean Energy Solutions, toward making a future plan for the long-range sustainability of the State.

And basically, it's a time waster to have the two agencies quarreling with each other. And since they have been merged, and I know it is unusual, I know we're the only State that does it. But since they've been merged, what's happened is, a lot of this is handled internally. And then a uniform policy comes out. And I think we can keep consumer protection aspect of PURA intact and still benefit from having the two agencies work with each other. Just as we do

on these -- on these committees, we try to work out compromises before we go to the full chamber. And it's similar to that when the agencies are forced to work with each other internally before they come up with a policy.

So right now, I'm leaning in your direction, I'm thinking that we have something that's working to avoid tedious delays and avoid friction between the two groups, and actually come up with something constructive that saves time and doesn't waste the State's efforts. So that's -- that's what I'm thinking. It's more efficient to just leave it the way it is. And we've been trying to get other witnesses to say which way they lean and they're ducking the question all day, but you're actually -- you actually have not ducked it. And you've actually said that you think it would be advisable to keep it together. I'm -- I'm agreeing with you. I think unless somebody can change my mind. I think you're on the right track.

At the National Conference of State Legislatures, we've run it both ways. We've run committees in conflict and we've run committees together and my experience there has been, it's better to slug it out in one group, and then come forward with one long-range plan and works. The conflict is now hidden from the public, but it is there, and it does get resolved and into the policy more efficiently.

Thank you for -- for weighing in on this because I was waiting to hear what you guys were gonna say.

MS. LYNCH: No problem. Full disclosure, I am a former employee of DEEP and Dan Esty is on the Nature Conservancy Board. So, we have a bit of a unique perspective and inside info on this particular Bill, or what would occur if this Bill were to actually take place.

REP. MUSHINSKY (85TH): Thank you.

REP. ARCONTI (109TH): Representative Petit.

REP. PETIT (22ND): Thank you, Mr. Chairman. Ms. Lynch, I wonder -- I lean the opposite way of Representative Mushinsky. I don't see how the two agencies are tasked with different -- different goals and it seems that they really should work independently. Communication in the modern age should be as simple as picking up the phone or actually now Facetiming or Zooming if they have an issue to discuss a topic. So, if you tell me -- crystallize the reasons that I'm not -- I'm not sure how this would cost more money and be -- be to the taxpayers' benefits to keep them together in the same place. It seems that one would have to be subordinate to the other, it's hard to believe that they could work on the same level at all times.

MS. LYNCH: I would defer to both Commissioner Gillett's and Commissioner Dyke's statements that there is a -- there's quite a bit of independence between the two organizations. But having worked within DEEP, I know there's a lot of communication. And I know from a personal perspective, Dan Esty would -- would also agree with that. And I would say in the past, when decoupling has been brought up, it's really come on the heels of rate increases. And those rate increases have come on the heels of a series of storms, or one major storm, Irene, Sandy, this last one. And then you could also argue a bit that these storms are the product of climate change. And hence, stronger, more efficient, better climate mitigation policy would help mitigate these issues. Hence, you know, really bringing together the need for a combined DEEP-PURA organization, increased efficiency, more communication, better alignment of policies. And so, for all these reasons, I think, my non-linear, back-of-the-envelope analysis really pulls strongly in favor of keeping them together.

REP. PETIT (22ND): So, I'm still not really following because, unless I'm completely wrong, I sort of want DEEP to be thinking out the box and

thinking about long-term plans in terms of where we need to go, what are our stretch goals? What are our reasonable goals? PURA really has got to be there for the average Joe, the average Mary to take care of them and say, "You know what, these stretch goals are interesting, but you know, we can't afford them right now -- or there's an issue with this." It seems to me that they have to have somewhat different philosophies, otherwise they fail at least what I perceive their -- their roles in our government -- government to be set up. I don't see how without being completely independent, they can ever truly be completely effective at their job without one being subordinate to the other. I guess we will agree to disagree.

REP. ARCONTI (109TH): Thanks Representative. Any other questions from Committee members. Seeing none, thanks for your testimony.

MR. GINN: All right, thank you. Next, we have Elias Petersen followed by Leslie Anderson.

MR. PETERSEN: Hello. Good afternoon, Chairman Arconti, chairman Needleman, Senator Formica, Representative Ferraro and members of the Committee. My name is Elias Peterson and I'm here today representing Kolmar Americans and its subsidiary American Green Fuels in supportive House Bill 6412.

I want to start by thanking both Chairman Arconti and Chairman Needleman for -- for raising this Bill in support of the biodiesel and bioheat industries here in Connecticut. Your continued support, you know, in our collective efforts to decarbonize the home heating sector is really -- really appreciated. And we're really hoping to move forward with -- with this Bill.

As many of you know, American Green Fuels is a 40 million gallon per year biodiesel production facility located at the Port of New Haven. We are the largest biodiesel plant in New England and on

the Eastern Seaboard. We have an estimated employment impact of more than 250 jobs in Connecticut, and an estimated economic impact to Connecticut of \$126.5 million annually.

Kolmar American Green Fuels directly employ over 100 people in Connecticut. American Green Fuels uses waste feedstocks, such as used cooking oil to produce a renewable fuel that results in up to a 93% reduction in greenhouse gas emissions compared to traditional controlling and diesel.

We support House Bill 412 in the immediate implementation of a low carbon fuel requirement for home heating oil. We are a ready-made solution to reducing Connecticut's greenhouse gas emissions because of the drop-in nature of our fuel, meaning it can be utilized in existing home heating oil equipment as you -- as you've heard throughout the day. On average, biodiesel reduces greenhouse gas emissions by 86%. It also reduces particulate emissions by 47%, and hydrocarbon emissions by 67%. Because of this, it reduces the risk of asthma and other respiratory diseases and has been labeled a clean air choice by the American Lung Association. So, in addition to those greenhouse gas benefits, that has significant clean air quality benefits.

Regarding the definition of low carbon fuel, as I know DEEP and a couple other groups have made comments on this, we're obviously open to -- to tweaking that definition to meet the goals in the State and the various concerns. But I would note that the -- the definition included is the first to advanced biofuels as defined by the EPA. So, the EPA has to certify that the fuel meets a 50%, or better reduction in greenhouse gas emissions. So, you can be assured that fuels being used to meet the standard are reducing greenhouse gas emissions.

Some of the other fuels that would likely be considered for use in home heating oil or other diesel replacements, like renewable diesel or

cellulosic diesel fuels, both of which have equivalent or better greenhouse gas qualities as -- as does biodiesel. But obviously, we're open to anything that would promote the biodiesel being used in the mandate.

Yeah, the other thing I wanted to -- to say is, you know, I'm a Connecticut consumer, and I have bought bioheat from both Jennings Oil, who testified earlier, and -- and Mitchell. Pleased to report, I've had no problems as well. And at the end of the day, that's really our goal is to displace that petroleum fuel with greenhouse gas producing a clean air fuel, like biodiesel. I really appreciate your time. And I'm happy to answer any questions.

REP. ARCONTI (109TH): Thanks Elias and thanks for your testimony. Thanks for always being available to the Committee to meet with members to discuss this topic. And was Kolmar/American Green, you know, able to submit written comments in DEEP's IRP, you know, process recently?

MR. PETERSEN: Absolutely, Chairman Arconti. We did submit comments. I will say that on some of the issues raised by DEEP in the IRP were highly technical. So, we work closely with the National Biodiesel Industry group that has those technical experts. In fact, I think was referenced earlier. They submitted comments yesterday, some 40 plus pages of comments on stuff that I could -- I certainly learned a lot reading them and I've been doing this for a while now. But I would -- I would refer to those for any sort of technical questions. And if anyone on the Committee has -- has additional technical questions, I'd be happy to put them in touch with -- with the MBB technical folks who have been working kind of hand in -- hand in glove with the DP on their questions. Including with experts at the Brookhaven National Laboratory, which would be the -- the foremost nationwide Research Center for this type of combustion.



REP. ARCONTI (109TH): Great, thanks. Representative Gresko has his hand up. Joe.

REP. GRESKO (121ST): Thank you, Mr. Chair. Good to see you. If memory serves on one of our -- one of the tours that I have taken at your facility in New Haven, you said to me that you ship to California, more biodiesel than you ship or use here in the state of Connecticut. Is that still accurate?

MR. PETERSEN: That's -- that's probably a year-to-year thing, Representative Gresko. We have shipped to California before, which is pretty amazing considering the -- the freight costs, you know. A lot -- A lot more of our fuel now ends up in Massachusetts because of their incentive program, which, you know, incentivizes those plans from above B10. California only occasionally works and it's, I would like to toot our own horn there, because the only reason we can ship to California is because our use of those waste feedstocks with that really low carbon intensity score, they incentivize based on really carbon reductions. So the fact that we're one of the cleanest fuels available on the market allows us to ship all the way out there and still, you know, hit their carbon goals. But that's exactly why we want to continue to look at, you know, program to Connecticut that can keep those shields here and those -- those greenhouse gas benefits here.

REP. GRESKO (121ST): And then, my last question is you would use the term "drop-i" as far as the fuel, so you're not just taking a bucket and throw it in there? I'm sure. It's like, why don't you enlighten me as to what that means?

MR. PETERSEN: Actually, that's a pretty accurate way to do it. You could just take a bucket and throw it in. Yeah, I mean, there's -- there's kind of two primary ways, obviously, we're on the production side. So, we -- there's so many retailers that we -- that are on the -- this hearing today that have spoken eloquently about, you know, their process of

getting it to the consumers. But I can tell you that for our purposes, there's -- there's two ways to get to biodiesel to the fuel. And the simplest way is simply to take a truck of biodiesel and pump it into your -- your storage tank. And that's equivalent to taking a bucket and dumping it in. And that it mixes it's a -- it's very, you know, it's turned into homogenous fuel. The other way is you can do is like on a rack, you can literally, you know, put in, I want 5% from this tank and 95% from this tank or 20-80, however you want to do it, and that would be called inline blending. But taking the bucket and dumping it in, it's just as good.

REP. GRESKO (121ST): Mr. Chair, thank you.

REP. ARCONTI (109TH): Thanks Representative. Any other questions for Eli? Seeing none, thanks for your testimony, Eli, and looking forward to working with you on the Bill.

MR. PETERSEN: Thank you so much.

MR. GINN: Yeah, thank you very much. Next up, we have Leslie Anderson, and then followed by Chris Herb for our final person giving testimony.

MS. ANDERSON: Thank you. Can you hear me?

MR. GINN: Yes. Okay.

MS. ANDERSON: Thank you, Chairman Arconti and members of the Committee. My name is Leslie Anderson, I'm the president of the Propane Gas Association of New England. And I'm pleased to have the opportunity to offer our comments in support of two bills, SB 855, the ACT TO DECOUPLE PURA AND DEEP and in support of HB 6412, the Bioheat Low Carbon Fuel Act.

The Propane Gas Association of New England is a regional Alternative Energy Trade Association. Our membership includes propane companies and suppliers

from numerous small companies who are often family owned and operated many for generations. And you've heard from several of our members today before I spoke. Propane is a recognized clean alternative fuel by EPA under the 1990 Clean Air Act, and it's an essential backup for our ever-increasing use of the electrical grid. propane has no ozone depleting chemicals and it doesn't leak methane like natural gas does. Using clean propane energy accelerates decarbonization, and access to it ensures environmental equity.

PURA and DEEP should be independent bodies in our opinion. When PURA was moved into the newly-formed DEEP several years ago, its independence was taken away. As a result, we've seen strategies from PURA that are influenced by DEEP and the oversight is also influenced by DEEP at the expense of Connecticut residents and businesses and also energy diversity is reduced as a result.

Connecticut continues to have the highest utility rates in the nation, and utility and Connecticut's continue to fail to maintain adequate coverage during normal weather events. I know this because our industry has installed record numbers of propane backup generators to homeowners in Connecticut over the last four years. This past August, the electricity failed to provide life sustaining power for over a week to the Connecticut residents and PURA and needs to be restored to an independent agency to be able to do their job and to hold utilities accountable.

We also support HB 6412 because energy security and resiliency requires energy diversity. Energy diversity protects the critical infrastructure within the State. Whether it's commercial and municipal needs backup power at critical infrastructure, including hospitals and -- and emergency management agencies energy for our cell phone -- cell phone towers is provided by propane. Residential needs for boiling water to cooking foods

when they don't have any power. It's essential for the safety of our citizens that we have energy-like propane, which is sustainable, green and resilient.

But we cannot exist just to be a backup we can't be a functioning business. If we don't have a base of people to also use our power for heat during the wintertime. No, we can't just be there in case something goes wrong. And that's an important thing to consider as energy diversity is looked at in the plan for climate is put together for the State of Connecticut.

You know in Texas now we're seeing people lining up at propane dispenser stations throughout this tank - - the State to fill their barbeque tanks right now so that they can cook on their grills and boil water to drink because their power is out. Here in New England in the pandemic, propane was the primary energy that immediately responded to outdoor testing sites to provide critical heat to keep equipment warm, to provide critical heat for workers that were going into biomedical sites like Lonza in New Hampshire, where they were tested before they entered the facility to conduct research on the vaccine. And that same facility is now producing the Moderna Coronavirus vaccine, and propane supplied the heat for those shelters for them to make sure that their employees were able to get into work and to work safely.

We've also been used for hand washing stations and hot showers for the homeless during the pandemic as well as a source of outdoor heating for businesses, restaurants, and testing sites throughout the States. The pandemic is just one recent example of how propane provides energy security and should be part of the resiliency strategy. Large scale biodiesel production actually produces 3% renewable propane during its process. And we support both the Senate Bill 855 and House Bill 6412. And we ask that you think about propane as you're looking at

Connecticut's energy solution and the environmental bills that are coming before you this session.

I myself am an environmentalist, I have a Master's degree in Environmental Management. I'm an environmental attorney, I worked for the Maine Department of Environmental Protection as a director of innovation and Bureau Director before my current role as President, the Propane Gas Association in New England. And I truly believe using propane furthers the environmental goal to reduce, reuse and recycle that EPA promotes. Unfortunately, in the U.S., propane incorrectly gets categorized and labeled as an evil fossil fuel rather than a beneficial byproduct. And when you think about the propane and the 5% that's produced when natural gas is produced. If we don't capture that, and beneficially use that propane to offset another energy source, it's simply burned off. And every year there's a global surplus of propane, because there's so much natural gas produced today, and then shipped around the world in -- to be substituted for energy like coal and other dirty substances.

So I'll just conclude by saying that I really think that propane should be a key component of our strategy as we move forward along with biodiesel. And we should look at whether or not we could even consider carbon capture and sequestration for some of this beneficial byproduct that's leftover from other energy sources. And I'd be happy to answer questions.

REP. ARCONTI (109TH): Thanks Leslie. Any questions from committee members? Representative Petit.

REP. PETIT (22ND): Thank you, Mr. Chair. Thank you, Mrs. Anderson. To get back to the decoupling of PURA and DEEP, previous testimony suggested that perhaps of increased costs, I didn't really understand that point at all. With your background, do you think that somehow that this could negatively impact costs to consumers?

MS. ANDERSON: From what I've heard others testifying, I don't think there's a big bureaucratic cost savings that we're getting by having these departments combined under one group. I think that there's more of a risk that we have influences from DEEP on picking and choosing winners and losers for energy strategies that is boiling over into PURA and causing them not to make decisions in the interest of the citizens and the residents the way that they probably should be. Looking at it without, you know, having that boss who's in favor of this amount of this type of energy. And so maybe you're not going to regulate that energy as strictly as you would if you were standing on your own and not being influenced. So I don't really think that there's a bureaucratic savings having them combined. I think it's more important to them to be separate and -- and have their own goals and not be answering to one another.

REP. PETIT (22ND): Thank you. I'm probably enjoying your testimony because I agree with it. But it would seem at times, their -- their goals might be one of the same, but many times they meet, would you agree that at times their goals might be somewhat disparate, and with especially with PURA having, as I said to a previous testifier, that, you know, they really need to represent John -- John and Mary Q. Public, per se, in their interest as opposed to potentially the long term strategy, the state of Connecticut or the Northeast? Would you agree with that sentiment?

MS. ANDERSON: I completely agree with you, 100%.

REP. PETIT (22ND): I'll quit there then, Mr. Chairman. Thank you, Ms. Anderson.

REP. ARCONTI (109TH): It's a good way to end, Representative Petit. Representative Buckbee.

REP. BUCKBEE (67TH): Well, I guess he doesn't get to end then if I'm still going here. But I think along the same line, thank you for your testimony, Leslie, as well. I kind of see that as a -- an opportunity for -- and tell me if you think this is wrong, I'm happy to be wrong. If you see PURA more as a watchdog to DEEP's activity, as opposed to everything under DEEP's rule kind of thing.

MS. ANDERSON: Right. I absolutely think they need to be independent. And, you know, checks and balances is so critical in this day and age and just looking at what's happening with multiple energy sources having problems in Texas right now with the weather being out. And I -- I went to the University of Texas for my undergraduate, my family's from there. So, I can understand, you know, how this extreme cold is really affecting their systems. But if you don't have somebody looking out for the consumers' best interests, rather than the policy that is coming down, I think that we have a big conflict because of that. And so that's the main reason that I am supportive of separating those two agencies and having one look at the overall benefits, you know, of the other. Because it's easy to make the statistics speak for themselves if you don't do a lifecycle analysis, you know. A few years ago, I testified, two or three years ago in Connecticut, because we were looking at putting a carbon tax on fuels, but we weren't going to tax the natural gas that was needed to make the electricity, you know, that generated the power. And that -- that's not fair. We have to look at a lifecycle analysis to make sure that the emissions are all captured accurately before we make big changes. You know, going in and throwing in a heat pump and taking out a perfectly good propane, or biodiesel furnace to do that, there's a carbon price there, you need to reduce the amount of things that you make, whether that's making a new heat pump, you know.

If your furnace is working fine, there's no need to take that out, you're going to be used -- making a

bigger carbon footprint just by the manufacturing to put in something new than you would ever gain from that transition. You know, and unfortunately, we're starting to see policy and in not just Connecticut, but the other six New England States that I operate in. We're seeing that and I don't think people are thinking it through from a big picture on the environment.

REP. BUCKBEE (67TH): Very well said. I was I was kind of leaning in that same way. And I think not only your testimony to the questions from Representative Pettit as well kind of lead me into that in that same lane I think I'm in and I -- I appreciate your input, it's valuable. And I also agree, the checks and balances work -- works for us in the legislature as much as we want to allow it to work and works when you have conflicting communities like New Milford in Danbury as well. So I think that's great. Thank you for your testimony. Thank you, Mr. Chair for your time.

MR. ANDERSON: Thank you. And we have members in both communities, I believe.

REP. ARCONTI (109TH): Nice little Danbury-to-New Milford rivalry brewing from this Public Hearing. More to come. Representative Ferraro.

REP. FERRARO (117TH): Thank you, Mr. Chair, and I'm not keeping score, but I think I'm going to start keeping score between you two. Anyways, I just have one question for the fine lady who just testified. Does she know how many states have adopted the combined motto of PURA and DEEP and how many states have adopted that model?

MS. ANDERSON: I don't know that. I do know that in the six New England States I operate in, Massachusetts is the only one that has a somewhat combined model but it's not as a combined I don't believe this Connecticut is, you know. There's -- there's a little bit more of a separation there and



at least there appears to be on the on the regulatory side. I think that would be a really great question, though for DEEP to come back with.

REP. FERRARO (117TH): I hesitated say but I did some preliminary internet review myself. And I'm pretty sure that Massachusetts is the only state that has that model. And as you said, it's not a complete model. So, the way I look at it now is that Connecticut is the only state, along with Massachusetts, that has decided to do that in the other 48 states, unless I'm wrong, and in my preliminary search is not correct. The other 48 states have these two agencies separated. So, there must be some wisdom in that. That's why that's why I'm asking.

MS. ANDERSON: I would agree with you, Representative.

REP. FERRARO (117TH): Thank you, Mr. Chair.

REP. ARCONTI (109TH): Right Thank you see no further questions, thank you, Leslie.

MR. GINN: All right, we have arrived to the last person signed up to testify, which will be Chris Herb.

MR. HERB: Good afternoon. My name is Chris Herb. I'm the President of the Connecticut Energy Marketers Association. We represent -- represent 600 primarily family-owned businesses that distribute energy products like biodiesel, home heating oil, which is now called bioheat and propane. I'm here today in support of two bills, SB 855, and HB 6412. My bulk of my comments will be on 6412. But briefly on SB 855, we support this.

If you had brought -- at hearing today, you had some recently retired regulators from PURA, you would hear that they believe that the Agency has lost its way from its primary job of protecting ratepayers

from uneconomic investments because of the environmental push from DEEP as the agent -- as a sub-agency to them. So, I would just say that if you have access to those people, you may want to talk to them, because they would be in agreement that these agencies need to be separate and distinct, one concentrating on policy and the other one protecting ratepayers from uneconomic investments. As I said, the bulk of my comments will be on 6412.

This is the question I'm going to ask you to put your mind to today. You've heard from a lot of business owners on this bill in support of it. And I'm going to ask you, because DEEP seems to have a different view of this. Do you think the heating oil, that oil has lower emissions than biodiesel? Because DEEP's push to prevent biodiesel from being a part of the State's energy future, leads us in a place where we will continue to use a low-cost reliable fuel like heating oil in place of a lower emissions fuel like biodiesel. That and I just want to remind you biodiesel is made from French fry grease, hamburger grease, donut grease, soybean oil. So just ask your question, is it credible that when DEEP tells you we should pause before we migrate to a low carbon liquid fuel?

DEEP would have you believe that if we stick with oil over renewable liquid fuels that -- that's better for the environment. That's what the message that they're sending. Evidence of their failure -- evidence of this is their failure to follow the law that you passed a few years ago when you told them to study the matter, and they didn't do it. As an industry, we came back to you and said, "Since they failed to follow the law the first time and study the benefits of biodiesel, you then passed the second law that required them to consider creating an incentive program in the IOP that would integrate bio -- incentivize biodiesel." And not a big surprise; they rejected it. They said, No, we don't want it here." And then they told you today, "We'll look at it in the next few years. They continue to

kick the can down the road." They continue to reject biodiesel. And the biodiesel industry is getting the message. You heard from American Green Fuels today. They're selling their product into other states. Other states that have arguably more stringent environmental regulations like California. So, the liquid fuels industry, the low carbon dioxide emitting liquid fuels industry is getting the message loud and clear from DEEP: "Do business elsewhere."

You heard from another biodiesel producer who is looking at opening up a biodiesel production -- production plant in Connecticut. He said they're not going to come here because policy is not aligned with them investing in this state like American Green Fuels has. The biodiesel industry is -- is right now under attack from DEEP, it is clear, there is plenty of evidence. They're using studies that are over a decade old that don't even conclude in writing that NOx emissions will increase. I'm glad that the National Biodiesel Board is working with Brookhaven National Laboratories and others to make sure we have a current study that clearly shows it. But the basis in the main push from DEEP not to move forward with that -- that thermal renewable energy Credit Program and the IRP was because of a study that is over a decade old, that didn't even say what they claimed it said.

And by the way, EPA has already made changes to that study. They've already responded to concerns that we voiced about how -- how our regulators are using that as the lead blocker to -- to not move forward with it.

You heard a lot -- You heard a lot of information on heat pumps, our members install more heat pumps than any other contractors in the state of Connecticut 600 -- our 600 members are installing 1,000s of them. There's installing for air-conditioning. The -  
- For whole home heat, they range between \$20,000 dollars in north of \$40,000 dollars. Low- and

middle-income families will be left behind in the energy future that the DEEP is planning for Connecticut, they will leave them behind, they will never afford it. Therefore, the only fuel that delivers lower emissions here in Connecticut, for those -- for those low to middle-income families would be the drop in fuel that you heard about today is biodiesel and other liquid fuels.

At the end of the day, even on Eversource's website, not only the cost the equipment in the home is not affordable for most of Connecticut, but on Eversource's website, which is in my testimony, the top two most expensive forms to heat with are resistance electric heat, and electric heat pumps. The least expensive: liquid fuels.

So, I would ask you that we have an environmental solution to a problem that the Legislature has been seeking to solve. It's delivered by family businesses in all of your districts. We've met with many of you about this. And you have regulators who are controlling or you're having policymaking -- policy folks at DEEP controlling regulators to block our industry from participating in solving emissions today. There, if you look at the IRP and pay close attention, a big part of the way the IRP is gonna lower electric emissions is by buying credits of wind and solar that are out-of-state. We can deliver lower emissions in every one of your -- every one of your constituents tomorrow, if we can see biodiesel have a larger presence in Connecticut. Thank you.

REP. ARCONTI (109TH): Thanks -- thanks, Chris. Representative Gresko.

REP. GRESKO (121ST): Thank you, Mr. Chair. Chris, I'm digging the gray here. In a nutshell, though, you had said -- I think it was Representative Cheeseman that had said, you know, you don't want to have a perfect state stand in the way of good and if I'm sure if we can, each of us can have a magic wish and -- and let's say that everybody had a heat pump.

Hey, great. But in that interim, you're saying that the -- the blend is the -- is the way to go?

MR. HERB: I think you're correct but I'm actually going to take issue as much as I hate to do that with -- with you saying that -- that we're the good. We are the perfect. We are the low-cost available option that's here today that doesn't require billions of dollars of new wind and solar generation to be built, billions of dollars of distribution upgrades through new transformers and power lines. We put the fuel in today, lower the emissions today, without raising electric rates. We have the highest electric rates in the country. When I worked in the building, we were deregulating the utilities, and all we've seen is increased prices since then. We have no impact on the ratepayer with the solution that we bring to the table. So, I would say that we're the perfect, and they're the good.

REP. GRESKO (121ST): Thank you, Mr. Chair. In the interest of time, that's all I have.

REP. ARCONTI (109TH): Thank you. Representative Cheeseman.

REP. CHEESEMAN (37TH): Thank you. Thank you, Mr. Chairman. Good to see you, Chris. So from your point of view, and I don't want to put words in your mouth, you would be advocating for Connecticut residents still to continue to have a choice. To choose you, to choose propane, to choose a heat source, to be able to write -- drive down the street and fill up at Mobil or Sunoco or do whatever they want, rather than writing out one check a month to Eversource, is that correct?

MR. HERB: That's very well-stated, Representative. I think that that's accurate. I would say this. We don't want DEEP and PURA to use the economic power of the ratepayer to overwhelm family-owned businesses. They're using their monopoly status to drive us out. Let consumers fairly choose. Don't

subsidize electric vehicles and electric heat pumps so that consumers have no choice but to go to the highest cost energy source available to them. Let us fairly compete. We've never been afraid to compete with them with the monopolies. We aren't now but I am afraid when DEEP and PURA become the chief cheerleaders for the utility industry that we don't have a shot in -- in -- and we're glad that we can come to this forum since we've been rejected in those other forums to be able to tell this story to. Because I think that the reasonable legislator who looks fairly at all of the information that's available, will choose the product that we can bring to market today.

REP. CHEESEMAN (37TH): Well, as you know, one of my concerns has always been the impact on the ratepayers of the decisions we take here. And certainly reading the IRP, when I see the reduction in greenhouse gas emissions produced by natural gas described as incremental, when it in fact is 60%. I'd love to get that kind of incremental return on my stock portfolio. What the heck. Anyway, thank you so much, Chris. I will look forward to continuing -- continuing the conversation with you. And thank you for your passionate advocacy for your members.

Mr. HERB: Well, no, thank you. And I will say that one of the comments you made dovetails into something that Representative Arconti mentioned, when Matt Mitchell from Mitchell Fuel was testifying, and that is that this Committee takes seriously your environmental responsibilities, and also protecting small family businesses. We really don't need protection, we need equal treatment. And -- and if we can get that we, -- I promise you we will deliver on our promises.

REP. ARCONTI (109TH): Thanks, Representative. Representative Ackert, I saw your hand up, then go down. I just want to make sure you didn't have a comment. All right, then we go to Representative Meskers.

REP. ACKERT (8TH): I'll ask one now that I'm on. How's that? Real quick. Okay, so Chris just real quick. You talk about the product you use to create the biofuel, right? So it's a waste product that you use, right? Where would the waste go if we're not using it in a fuel resource?

MR. HERB: It would go into landfills. The portion of the soybean which is the largest feedstock for biodiesel in the country used to be thrown into landfills, it would -- it would pollute the land. And the farmers out in the Midwest figured out that if we take that oil portion of the soybean and we turn it into a nearly BTU equivalent fuel, that that's a better use of it. And it's a profit center for farmers. In terms of the used cooking oils that are at restaurants. Once upon a time, those restaurants had to pay a hazardous materials company to take them away and treat them. But now we're using the fuel. It is the story of the American Indian, right. When they hunted the buffalo, they used the meat for food, the hides for clothing, and the bones for weapons. We are now using all of these waste products instead of putting it into the waste stream we're using to heat your home. It's exciting.

REP. ACKERT (8TH): I wanted to make that point, because it's important point to make, along with the anaerobic digesters that we talked about the waste that we're making to make energy. So, thank you. Appreciate your time. And thank you, Mr. Chairman,

MR. HERB: And your good work with your biofuel, I know that you appreciate that your district is a direct beneficiary of the hard work that they have done.

REP. ARCONTI (109TH): Representative Meskers.

REP. MESKERS (150TH): Well, thank you, Chairman Arconti. And Chris, a lot of passion. You know, you when you came down with me to visit some of my

distributors, you were more circumspect. So, but I appreciate the passion. And I think the advocacy work, I salute you for it.

I think the clarity of your call, the only criticism or the only observation is, I think that the most important message I get from you is not only do you feel and, you know, I can understand that you're not on a level playing field because of this subsidies or -- or the distortions that -- because we are trying to lower the carbon footprint. And then I guess the -- the salt in the wound is that you're not labeled as being part of the solution with lowering the carbon footprint.

So, I think in honesty, I think, you know, you represent a valuable part of that carbon goal. And the benefit as well and I think that was an important point you mentioned, you know, I think needs to be emphasized is that whatever we're doing in reducing the carbon footprint in the state, I support. Whatever we're doing to try to improve the environment, I support. But when we raise our revenues, and we price -- cost shift and price shift, which we may have to do when you look at carbon strategies.

I guess the question is that that one, which you kind of alluded to, maybe we needed to be more direct? Do we mail the check to Peoria to get our -- our greener energy? Or do we mail it to the biodiesel guy down the block and the people he employed? So when -- when we look at cost-shifting to provide for a better environment, we have to think of what do we do on the job front because there are two parts. You know, sitting on binding revenue and finance, I'm going to send the tax bill to Mr. Bolonia, and his -- his fuel company down in Greenwich. But he's also going to employ people who are going to pay income tax. So when I take and raise money from one part of the State to pay, write a check out to Peoria, I kind of finish my economic cycle. Whereas if I pay it to somebody in the State,



he's creating jobs and generating a virtuous cycle, not only on the energy side, but economically. S

o I hope we look when we try to capture energy, we also try to capture the economic activity within the State.

MR. HERB: And I, you know, and I tend to not -- I tend to not try to appeal to your sense of just trying to be protect a small -- small family, businesses and jobs. But it is a part that I don't emphasize enough. I'll say there are two points of what you said. And that is the -- the testimony that I was trying to deliver is -- is that part of DEEP strategy is clearly to -- to claim lower emissions locally, by incentivizing -- by buying credits of wind and solar that's actually benefiting other communities. Biodiesel has that effect right here, right now.

One very important point that I didn't have time to get out of my testimony is -- is that the other unfair piece of this is that DEEP continued to use an outdated measure of emissions. They use burner tip emissions. What happens at the tailpipe of the car, or the smokestack of the house. We need to look at a lifecycle analysis, cradle-to-grave, where'd the fuel come from? How did it get here, and what happens when it's combusted? And when you do that, it throws natural gas out of -- out of the game. It throws electricity that's using fossil fuels, like natural gas out of the game. But it keeps biodiesel in the game, because when you actually calculate all of the emissions that it takes to produce it, transport it, and then when it's combusted, then we win.

And that's why there's been a hesitancy of them to listen to our interview to say, start measuring it fairly, like every other environmental organization in the country and in the world does. If we could get them to do that, then it changes this whole conversation, and we don't look like we're just,

we're someone that you want to support, we become someone you have to support, because we actually deliver on the 2030 and 2050, Greenhouse Gas Reduction Clause.

REP. MESKERS (150TH): Okay. Passionate again, I appreciate the presentation. I have a technical question for you, because when I went down and talk to you with Rick Bolonia, the conversation was about the mix. And the viscosity of the mix and the stability of that mix. And the limitation on biodiesel in the short-term is that the fuel has a temperature constraint before it becomes too thick to burn, or to process.

So how are we proceeding on that? Because ultimately, when you try to close the virtuous cycle, you want to get to 100% biodiesel within the mix, right?

MR. HERB: Yeah. So, for us to achieve carbon neutrality, we are going to have to get to that 100% blend at some time in the future. If we're going to -- we're going to get to net zero carbon dioxide emissions, we have to be at 100%. And you are right, that -- that the cold weather properties of biodiesel are different than traditional fossil fuels. The way that that's handled is through tank heating. You know, most tanks are in the basement. But you heard earlier testimony from a young man from J&A Water & Oil in Naugatuck, who said that he used a B100 in his house in Prospect. Prospect by no means is very representative of the temperatures in the State of Connecticut. And he made it work. So, what -- what -- any concerns about cold weather properties are being addressed through additives, and through -- through tank heating. It's not something we haven't dealt with in the past as an industry. But like you said, when you're talking about bacon grease that's now being turned into a heating fuel, then it needs a little different treatment, but it's not an obstacle whatsoever.

REP. MESKERS (150TH): Thank you very much. Thank you for your testimony.

REP. ARCONTI (109TH): All right, see no more questions. Thanks, Chris, for your testimony. And looking forward to working with you on this Bill.

MR. Herb: Thank you, thank you.

REP. ARCONTI (109TH): All right, everybody. That concludes the list of everyone signed up to testify. So that concludes today's Energy and Technology Public Hearing. I want to thank everyone for participating. Thank Committee members for your great questions and the back and forth. I think our Clerk Will, for running a very smooth, first Public Hearing. Our next one, we're looking at March 2nd, Tuesday, March 2nd for the next Energy and Technology Public Hearing. So, until then, be safe, everybody.