COMMITTEE

CONSUMER PROTECTION

of the

SUFFOLK COUNTY LEGISLATURE

MINUTES

A regular meeting of the Consumer Protection Committee of the Suffolk County Legislature was held in the Rose Y. Caracappa Legislative Auditorium of the William H. Rogers Legislature Building, 725 Veterans Memorial Highway, Smithtown, New York on August 11, 2009.

MEMBERS PRESENT:
Leg. John M. Kennedy, Jr., Chairman
Leg. Ricardo Montano, Vice Chair
Leg. Brian Beedenbender
Leg. Lou D'Amaro
Leg. Edward P. Romaine

ALSO IN ATTENDANCE:
William J. Lindsay, Presiding Officer
Sarah Simpson, Assistant Counsel
Ben Zwirn, Deputy County Executive
Barbara LoMoriello, Deputy Clerk
Paul Perillie, Aide to Majority Leader
Linda Bay, Aide to Minority Leader
Denis McElligott, Commissioner of Consumer Affairs Department
Ali Nazir, Aide to Leg. Kennedy
Bob Martinez, Aide to Leg. Montano
Kaitlin Boyd, Aide to Leg. Beedenbender
Justin Littell, Aide to Leg. D'Amaro
Debra Alloncius, AME Legislative Director
Steve Tricaraco, Aide to County Executive
William Shilling, Aide to Presiding Officer
Lynne Bizzarro, County Attorney's Office
Kevin MacLeod, Chairman of Long Island Solar Energy Industries Association, President KPS Solar
Sail Van Nostrand, Vice Chairman, LISEIA, President, Energy By Choice
Kathy Cunningham, Program Director, Renewable Energy Long Island
D. Jerry Flaherty, Chief Electrical Inspector, Electrical Inspection Services, Inc.
Ralph Pacifico, PE, Pacifico Engineering, PC
Joe Schroeder, Energy Specialist, Budget Review Office
And all other interested parties

MINUTES TAKEN BY:
Diana Flesher, Court Stenographer

MINUTES TRANSCRIBED BY:
Denise Weaver, Legislative Aide

THE MEETING WAS CALLED TO ORDER AT 1:18 PM

CHAIRMAN KENNEDY:
Can I have all Legislators to the horseshoe for the Consumer Affairs Committee. Okay.

SALUTATION

Okay. We have a presentation today by gentlemen from the solar industry. But what I'm going to do if it's okay with you gentlemen is I'm going to move through the agenda. We have a couple of appointments. And I'd like to just give folks the opportunity if they have any particular comment on resolutions and then we'll quickly turn to your presentation if that's okay. And we don't have any --

MS. LOMORIELLO:
No cards.

CHAIRMAN KENNEDY:
We don't have any cards? No speakers for public portion? Fine. Okay.

TABLED RESOLUTIONS

Moving to agenda then if we can, under tabled resolutions first is **IR 1415, Adopting Local Law No. -2009, A Local Law banning the sale of drop-side cribs in Suffolk County. (Horsley)**

LEG. BEEDENBENDER:
Motion to table.

LEG. D'AMARO:
Second.

CHAIRMAN KENNEDY:
Motion to table by Legislator Beedenbender, seconded by Legislator D'Amaro. All in favor? Opposed? **Tabled for public hearing. (VOTE: 5-0)**

Next we have **1604, Adopting Local Law No. -2009, A Local Law requiring retailers of swimming pools to post signs regarding State pool alarm requirements. (Romaine)**

LEG. ROMAINE:
Motion to approve.

LEG. D'AMARO:
Second.

CHAIRMAN KENNEDY:
Okay. Motion to approve by Legislator Romaine, second by Legislator

D'Amaro. Any comment? All in favor? Opposed? **Resolution stands approved. (VOTE: 5-0)**

INTRODUCTORY RESOLUTIONS

1633, Adopting Local Law No. -2009, A Local Law to standardize the dating and labeling of milk in Suffolk County. (Alden)

LEG. BEEDENBENDER:
Motion to table for public hearing.

CHAIRMAN KENNEDY:
Motion to table by Legislator Beedenbender. I'll second it. All those in favor? Opposed? **The resolution's tabled. (VOTE: 5-0)**

1664, Approving the reappointment of Patrick M. Pichichero, Jr. as a member of the Suffolk County Home Improvement Contractors Licensing Board. (Co. Exec. Levy) Do we have -- we don't have Mr. Pichichero here, but this is a reappointment. We have the Commissioner of Consumer Affairs here. I had a prior conversation with him and he's indicated that all the reappointments that we have before us today all have good attendance and are fully participatory. So based on that I'll make a motion to approve Mr. Pitchichero.

LEG. BEEDENBENDER:
Second.

CHAIRMAN KENNEDY:
Second by Legislator Beedenbender.

LEG. MONTANO:
Quick question.

CHAIRMAN KENNEDY:
Certainly.

LEG. MONTANO:
Just want to know how long has Mr. Pichichero served on this licensing board, if anyone knows?

CHAIRMAN KENNEDY:
Can I ask the Commissioner, Mr. Commissioner, could you go ahead and just take a microphone for a moment please in case we have questions regarding any of the individual members.

LEG. MONTANO:
Denis, I'm going to probably ask the question on all the appointments. I just want to know when they began and how long they've been serving on this -- the respective boards?

COMMISSIONER McELLIGOTT:
Each one has been serving longer than I have.

LEG. MONTANO:
That I know.

COMMISSIONER McELLIGOTT:
All of them -- each one of these gentlemen has been serving on the respective boards. Each one has served --

LEG. MONTANO:
Probably multiple terms, I'm thinking.

COMMISSIONER McELLIGOTT:
-- multiple terms. And, Legislator Montano, we don't have a long list of folks who are willing to serve on these boards and provide me with excellent expert advice regarding the licensing of these particular industries.

LEG. MONTANO:
Right.

COMMISSIONER McELLIGOTT:
I would recommend to this body that each one of these gentlemen be reappointed, be approved.

LEG. MONTANO:
Oh, Denis, I have no opposition to reappointment. What I'm trying to gauge is how long each of the members has been on the respective boards to, you know, and essentially to know what these boards do. Some of them I do, some of them I don't. So if you have that information that's fine; if not, we'll just move forward.

COMMISSIONER McELLIGOTT:
I don't have that information for you today. What I can tell --

LEG. MONTANO:
Could you get it for me before the next meeting?

COMMISSIONER McELLIGOTT:
Absolutely.

LEG. MONTANO:
Yeah, just for my information.

COMMISSIONER McELLIGOTT:
What I can tell you is this: Each of the boards meet every month except the month of July. Each one of the boards meets and reviews the documentation and paperwork to decide and recommend to the Commissioner whether an individual is qualified for a particular license.

LEG. MONTANO:
Well, let me ask you this, Denis, and I don't want to delay this, but what I'm trying to find out is, for instance this first one, Suffolk County Home Improvement Contractors Licensing Board, do you know how many applications you get a month for new licenses?

COMMISSIONER McELLIGOTT:
I know that it's yearly. It's approximately 1700.

LEG. MONTANO:

Okay.

COMMISSIONER McELLIGOTT:
And yearly there are approximately 3400 renewals. And I'm --

LEG. MONTANO:
So there are 3400 renewals and an additional 1700 applications.

COMMISSIONER McELLIGOTT:
Correct.

LEG. MONTANO:
How many of those applications are rejected or how many are accepted, either way you want to go, of the 1700? Because I would imagine the renewals are automatic.

COMMISSIONER McELLIGOTT:
The renewals are not automatic.

LEG. MONTANO:
They're not, okay.

COMMISSIONER McELLIGOTT:
In very many respects, the inquiry that's done with regard to a renewal is based upon the answers that a particular individual gives when they fill out the renewal with regard to judgements, criminal history.

LEG. MONTANO:
Right, okay.

COMMISSIONER McELLIGOTT:
And/or information we receive from the County with regard to child support issues. Any one of those could trigger a more in-depth inquiry rather than just simply a paperwork renewal. But for a new application there is much more scrutiny that goes into each one of them. Our goal is not necessarily to prevent people from getting the license. We want people to have our license; because once they've got our license, they're within the system, and our license we believe is --

LEG. MONTANO:
They're doing good work, we're collecting fees.

COMMISSIONER McELLIGOTT:
Right.

LEG. MONTANO:
But again, just to go back to the question, do you know offhand how many of the -- and I assume that your 1700 figure is your gross number of applications for a new contractor home improvement license per year.

COMMISSIONER McELLIGOTT:
It's an approximation.

LEG. MONTANO:
Approximation, yeah, I got you.

COMMISSIONER McELLIGOTT:
And it is not the applications. Those are -- that's the approximation of the number of licenses --

LEG. MONTANO:
Issued.

COMMISSIONER McELLIGOTT:
-- given out, issued each year, yes.

LEG. MONTANO:
Okay. Then my question, I'll rephrase my question, I'll change my question. Of how many applications do you receive a year for home -- for new home improvement licenses?

COMMISSIONER McELLIGOTT:
I don't know the answer to that.

LEG. MONTANO:
Could you find out for me?

COMMISSIONER McELLIGOTT:
I can.

LEG. MONTANO:
Thanks, Denis.

COMMISSIONER McELLIGOTT:
Yes.

LEG. MONTANO:
I appreciate that. Thanks.

COMMISSIONER McELLIGOTT:
No, I will have that information for you at the next meeting.

CHAIRMAN KENNEDY:
Okay. Thank you, Mr. Commissioner and Legislator Montano. So we have a motion and a second on Mr. Pichichero. All those in favor? Opposed? Okay. **1664 is approved. (VOTE: 5-0)**

1665, Approving the reappointment of Richard L. Crescenzo as a member of the Suffolk County Commercial, Industrial, Residential Septic Tank/Sewer Drain Treatment, Bacteria Additives and Maintenance Board. (Co. Exec. Levy) Again, based on the Commissioner's former indications, I'll make a motion to approve.

LEG. D'AMARO:
Second.

CHAIRMAN KENNEDY:
Second. We got a second by Legislator D'Amaro. All those in favor?

LEG. MONTANO:

Quick question, Mr. Chairman.

CHAIRMAN KENNEDY:
Yes. Yes, certainly.

LEG. MONTANO:
I just wanted to ask the Commissioner, could you just give me a very brief -- or anybody a very brief explanation of what they do.

COMMISSIONER McELLIGOTT:
Each of the board --

LEG. MONTANO:
The members of the board, yeah.

COMMISSIONER McELLIGOTT:
Sure. Each of the boards meets on a monthly basis. Each of the boards reviews any application that I receive or that my staff receives where there is a red flag raised, a question raised about an individual's qualifications to receive my department's license. They are individuals who are knowledgeable about the industry. They will review the application. And if they desire, they will ask for an interview with the licensing -- the potential licensee. They'll call the individual in and they'll question them about their qualifications, any information on the application that they have a question about.

In all of the my licenses, there's a particular requirement for experience in the industry.

LEG. MONTANO:
Right.

COMMISSIONER McELLIGOTT:
That's where the boards -- each of these boards is the most useful to me being able to evaluate whether or not an individual's work in the industry is sufficient to satisfy our standards.

LEG. MONTANO:
So just to put this in layman's terms, they basically install cesspools and septic systems in the County.

COMMISSIONER McELLIGOTT:
It is, it is --

LEG. MONTANO:
Or is it more complicated than that?

COMMISSIONER McELLIGOTT:
It's cesspools, septic systems. It is also all of the maintenance work that is done on cesspools; pumping, chemicals. And it is also the business of all of the port-a-potties as well.

LEG. MONTANO:
Got you. Denis, could you do me a favor, the same question I asked on the last one, I just want to get an idea of how many applications you

get a year and how many are accepted or how many are rejected. We can do the math.

COMMISSIONER McELLIGOTT:
Legislator Montano, what I will do before the end of this week, I will be sure, I will have that information to you as well as each of the applicants or each of the candidates here, I'll tell you exactly when they were first appointed to the board.

LEG. MONTANO:
Thanks, Denis, I appreciate it.

CHAIRMAN KENNEDY:
Denis, while you're there, I have a question on this one as well. You mentioned the pump-out vehicles. Do we -- obviously we need to go through the licensing process, but there's really only one place in Suffolk County that they can go ahead and discharge and that's down in Bergen Point. Do they actually confirm down there when guys are coming in for discharge that they are -- that they have a current license, they're validly licensed or they're interim?

COMMISSIONER McELLIGOTT:
It's one of best sources of information for our licenses. There is absolutely no way for an individual in this business to go to Bergen Point without having and showing a valid license.

CHAIRMAN KENNEDY:
Okay.

COMMISSIONER McELLIGOTT:
Absolutely.

CHAIRMAN KENNEDY:
All right. Thank you. Okay, so we have a motion and a second. All those in favor?

LEG. MONTANO:
He has a question.

CHAIRMAN KENNEDY:
Oh, I'm sorry. Legislator Romaine.

LEG. ROMAINE:
No, actually I just want to let you know Mr. Chairman, I just have a few questions for the Commissioner maybe at the end of the resolutions.

CHAIRMAN KENNEDY:
Absolutely. That's why we invited him to be here and I'm sure he'll be happy to address them, Legislator Romaine. Thank you.

All right. So with 1665, all those in favor? Opposed? **Approved. (VOTE: 5-0)** Okay.

1666, Approving the reappointment of Robert N. Falk as a member of the Suffolk County Commercial, Industrial, Residential Septic Tank/Sewer Drain Treatment, Bacteria

Additives and Maintenance Board. (Co. Exec. Levy) I'll make a motion to approve.

LEG. D'AMARO:
Second.

CHAIRMAN KENNEDY:
Same motion, same second. All those in favor? Opposed? **Approved. (VOTE: 5-0)**

1667, Approving the reappointment of C. W. (Judge) Coleman as a member of the Suffolk County Commercial, Industrial, Residential Septic Tank/Sewer Drain Treatment, Bacteria Additives and Maintenance Board. (Co. Exec. Levy) Same motion, same second. **Approved. (VOTE: 5-0)**

1668, Approving the reappointment of Joseph H. Baier as a member of the Suffolk County Commercial, Industrial, Residential Septic Tank/Sewer Drain Treatment, Bacteria Additives and Maintenance Board. (Co. Exec. Levy)

LEG. ROMAINE:
Motion.

CHAIRMAN KENNEDY:
Motion by Legislator Romaine. I'll second. All those in favor? Opposed? Resolution's **approved. (VOTE: 5-0)**

IR 1669, Approving the reappointment of Russell J. Calemmo as a member of the Suffolk County Electrical Licensing Board. (Co. Exec. Levy) I'll make a motion.

LEG. D'AMARO:
Second.

CHAIRMAN KENNEDY:
Second by Legislator D'Amaro.

LEG. MONTANO:
Mr. Chairman? Denis, just to be consistent, same information on the Electrical Board?

COMMISSIONER McELLIGOTT:
Every single one of them, Legislator.

LEG. MONTANO:
You got it, thanks.

CHAIRMAN KENNEDY:
All those in favor? Opposed? Resolution stands **approved. (VOTE: 5-0)**

IR 1670, Approving the reappointment of Donald J. Fiore as a member of the Suffolk County Electrical Licensing Board. (Co. Exec. Levy) I'll make a motion.

LEG. BEEDENBENDER:
Second.

CHAIRMAN KENNEDY:
Second by Legislator Beedenbender. All those in favor? Opposed? Resolution stands **approved**. **(VOTE: 5-0)**.

Before we move to our presentation then, Legislator Romaine, you had a couple of questions for our Commissioner.

LEG. ROMAINE:
Just a few questions and these should be of no new news, I discussed them briefly with the Commissioner last week.

Commissioner, could you tell me roughly what the vacancy rate is amongst the clerical, the secretarial help at your department?

COMMISSIONER McELLIGOTT:
Yes. As of right now I believe based on retirements and transfers, I'm down three clerk typists.

LEG. ROMAINE:
Okay. Let me ask you this: I'm a homeowner, I have a contractor that's doing business, he's licensed by Suffolk County, something gets screwed up, I file a complaint. How long is it before that complaint is looked at and evaluated? Not addressed, not sending someone out in the field, not resolved, but before someone physically looks at that and makes an evaluation of how to proceed?

COMMISSIONER McELLIGOTT:
I review every complaint that comes in everyday. But I'm not the individual who does the opening of the file and then the assigning of the file.

LEG. ROMAINE:
Right.

COMMISSIONER McELLIGOTT:
That takes about four to six weeks.

LEG. ROMAINE:
Four to six weeks. So if I have a complaint against a contractor and I file it with your department, that complaint won't get looked at from four to six weeks.

COMMISSIONER McELLIGOTT:
I didn't say that.

LEG. ROMAINE:
Oh, okay.

COMMISSIONER McELLIGOTT:
I said I will look at it the day it's received.

LEG. ROMAINE:

No, I understand. Let me reevaluate that -- rephrase that. That complaint won't get acted on -- by acted on, *here, do something about this* for four to six weeks?

COMMISSIONER McELLIGOTT:
In the regular course of business for the ordinary type of complaint, yes, there are certain complaints which are much more time sensitive that end up being put on the top of the pile. There are also complaints such as weights and measures type complaints that are very time sensitive, those go to the top of the pile as well.

LEG. ROMAINE:
Right. I'm talking about home contractors now.

COMMISSIONER McELLIGOTT:
Yes.

LEG. ROMAINE:
Because most of ours, if we get complaints it's not about weights and measures; it's about a contractor that someone dealt -- did business with that was licensed by the County that they filed a complaint with your office. That's about four to six weeks.

COMMISSIONER McELLIGOTT:
Correct.

LEG. ROMAINE:
Is there a backlog in those complaints?

COMMISSIONER McELLIGOTT:
About four to six weeks.

LEG. ROMAINE:
Okay. And how are you for revenue this year as compared to last year?

COMMISSIONER McELLIGOTT:
Because of the issues surrounding the item pricing waiver, we're ahead of where we were last year.

LEG. ROMAINE:
Okay.

COMMISSIONER McELLIGOTT:
Because there's about $600,000 in revenue that's come in through my department which didn't exist.

LEG. ROMAINE:
So the Budget Office hasn't had you in recently to complain that the revenues are not sufficient to what they would -- what they had hoped for?

COMMISSIONER McELLIGOTT:
No, sir.

LEG. ROMAINE:
Okay. Okay, thank you very much.

CHAIRMAN KENNEDY:
Mr. Chair, yeah, certainly. Presiding Officer Lindsay has joined us and some questions for the Commissioner.

P.O. LINDSAY:
Denis, is there anything on the horizon that you're going to get some more people?

COMMISSIONER McELLIGOTT:
It's being actively discussed right now, yes.

P.O. LINDSAY:
Okay.

COMMISSIONER McELLIGOTT:
Especially in terms of the Weights and Measures Inspector. We're actively working on that and canvassing the list right now.

P.O. LINDSAY:
Besides the clericals you mentioned, you have some people that are getting ready to retire over there, too; right?

COMMISSIONER McELLIGOTT:
We do. You're right.

P.O. LINDSAY:
And you're down an electrical inspector.

COMMISSIONER McELLIGOTT:
That's correct.

P.O. LINDSAY:
And at one time we had a Director of Licensing there. We had a Deputy Commissioner.

COMMISSIONER McELLIGOTT:
You're not telling me anything I don't know, sir.

P.O. LINDSAY:
I mean, you've got an awful lot of vacancies in that department. And a department that, I think where Legislator Romaine was going is, your department is one of the few revenue generating departments in the County inventory, so --

COMMISSIONER McELLIGOTT:
Well, if you weren't going to mention it, I was.

P.O. LINDSAY:
Yeah, it just -- it's frustrating to us because we think that the department could do a much better job if it was fully staffed.

COMMISSIONER McELLIGOTT:
I understand that. And as I said to Legislator Romaine the last time I was here, I don't think there's any commissioner, department head, head of any agency who wouldn't be here telling you, we could do

better if we had more people.

P.O. LINDSAY:
I understand that. But your -- the amount of people you have to work with in your department isn't the size of the Health Department or, I mean, you're talking about three clericals vacancies and a couple more retiring. How many clericals do you have?

COMMISSIONER McELLIGOTT:
The total staff is 37.

P.O. LINDSAY:
But that's the inspectors and everything.

COMMISSIONER McELLIGOTT:
Correct. That's the weights and measures inspectors, the home improvement inspectors and all the clerical staff.

P.O. LINDSAY:
But doesn't the process start -- but, again, Legislator Romaine -- it starts with the clericals. If the clericals don't open the letters, don't fill out the initial paperwork, it never gets to the inspectors.

COMMISSIONER McELLIGOTT:
Understood. And, you know, and we make a very specific effort to make sure that the complaints get to our inspectors as soon as we possibly can.

P.O. LINDSAY:
I'm sure you guys are doing the best you can with what you have. But the point that I'm making is, it isn't as if you have three vacant clerical spots out of 50. I mean you probably only have a dozen; right? Or less?

COMMISSIONER McELLIGOTT:
Correct. Correct, less.

P.O. LINDSAY:
Less. So --

COMMISSIONER McELLIGOTT:
But, Mr. Presiding Officer, I also would like to make sure that everyone here understands that every single license that we give out and every single consumer complaint that we resolve is followed with a survey to the public asking them if they're satisfied with the work that my office has done. 99.9% of those survey responses are very happy with the work that we've done.

P.O. LINDSAY:
Don't take this the wrong way. I'm not being critical of your department. All I'm trying to do is to get you some more help.

CHAIRMAN KENNEDY:
Mr. Chair, in that line I guess I would also just share with you as well, Denis, in my prior life when I was in the County Clerk's Office, I had the

privilege of serving along with Legislator Romaine in one of the few departments along with Consumer Affairs that was and is continues to be revenue generating.

One of the things that I found is clerks acquire specialized knowledge over time. A grade 9 clerk typist is a generic way to enter County government. But over a period of years they become adept at whatever particular area they're in. However, as they go to take promotional exams, sometimes they wind up having to leave a particular department and go elsewhere. Sometimes, though, you can work with Civil Service to take a grade 9 to run it up to a grade 11 to a grade 13.

My point is sometimes you have to be creative to retain the institutional knowledge in the area. So if your clericals are not leaving because of retirement but are seeking promotion in other departments, maybe that's an area you can re-visit as well to keep the informational base.

COMMISSIONER McELLIGOTT:
I am learning that over the last eight months. And we have in fact done that with certain of the weights and measures inspectors as well in order to keep someone on board. So I'm aware of that.

CHAIRMAN KENNEDY:
Good, good. Okay. Any other questions for the Commissioner? Okay. Thank you.

COMMISSIONER McELLIGOTT:
Thank you.

CHAIRMAN KENNEDY:
We are joined today by Kevin MacLeod who's the Chairman of the Long Island Solar Energy Industries Association and a number of his colleagues, Mr. Van Nostrand, Ms. Cunningham, Mr. Flaherty and Mr. Pacifico. Welcome. Thank you for being here.

The notion of solar energy is something that all of us are very much of a mind to want to explore and understand. We have a number of projects; capital projects through our Department of Public Works looking at alternative energy solutions for the County as a consumer and also to kind of lead the way for the rest of the industry out there. So on that happy note, Kevin, I'm going to turn the mike over to you and say educate us, please.

MR. MAC LEOD:
Thank you, thank you. I appreciate you giving me the opportunity here to do this presentation today. Mainly we're going to be covering residential installations. We're not going to be getting into any of the commercial work today. So I'm going to zip through this. We have a quick video that runs about three minutes. After the presentation, then, Kathy Cunningham for RELI and Jerry Flaherty, Electrical Inspector and Ralph Pacifico are going to say a few words after I'm done. All right.

So we'll go right into our presentation. And if you have any questions, and I hope you do, just stop me anytime during the middle of the

presentation. I'll be glad to answer or one of our people will be able to do that. Okay.

POWER POINT PRESENTATION

So just a quick overview, we're going to go into the rebate process and the tax incentives for the homeowners, initial site visits, qualifications, the application to LIPA. Project layout permits, engineering, installation of the mountings, rails, solar panels, electrical wiring, grounding, connecting the modules. And the electrical inspection, LIPA inspection and the issuance of the utility rebate.

This seems to be a burning desire for everybody to know what's going on in the industry, exactly what it's costing the homeowner these days to install a system. So I figure I'd throw this in first. The utility rebate from LIPA is currently $3.50 a watt. The Federal Tax Credit is 30% of the net cost after the LIPA rebate. It used to be $2000 -- capped to $2000. It was removed in January under the Economic Stimulus Act. The tax credit for the State is still 25% of the net costs and that's capped at $5000.

I also want to add that the Town of Southampton offers a $2500 rebate to their residents on a limited basis per year. Usually it's about 20 installations. So that's a little extra incentive that they get out there in Southampton.

So if you want to just rundown the summary of the costs, the average price right now stands in the industry about $7 a watt as a cost to the homeowner. What this is, is that whatever the size of the system is, either it's 2000 watts, 5000 or 10,000, you multiply that by that $7 a watt, that's what you get for your gross costs. So if we were installing a -- the largest system the homeowner could put in to offset the electrical cost, that would be a 10,000 watt system, which is a 10Kw system, you multiply that by $7 a watt and your gross price is $70,000 to start with.

Now, the utility rebate that you get from LIPA is a pretty generous one, $35,000, which is based on that $3.50 a watt. Your net amount after that is $35,000. That's when you would apply the 30% tax credits from the federal government, that's $10,500. Your state tax credit at 25% is another $5000. So the out-of-pocket cost to the homeowner after the rebates and the tax credits is $19,500. And that's for the largest system that you can install. The return of investment is about seven-and-a-half years. I guess everybody -- yeah, Legislator Beedenbender?

LEG. BEEDENBENDER:
Thank you. Just on the size of that 10,000 watt system, how many -- I mean, is it based on -- its roof size that would allow you to get that?

MR. MAC LEOD:
Yes.

LEG. BEEDENBENDER:
So do you have any idea is there any concept of what the average size of a system is?

MR. MAC LEOD:
Five to seven kilowatts.

LEG. BEEDENBENDER:
Five to seven?

MR. MAC LEOD:
Yeah.

LEG. BEEDENBENDER:
Okay. Thank you.

MR. MAC LEOD:
Yeah.

LEG. MONTANO:
Kevin, so that would reduce the price in half.

MR. MAC LEOD:
Yes, right. So if it's $7 a watt and you're doing a 5000 watt system, it would be 35,000 instead of 70,000.

LEG. MONTANO:
Right. You just do the math down.

MR. MAC LEOD:
Yeah, right.

LEG. MONTANO:
If your average system is -- what do you call it -- 10,000 watts, you're looking at a cost of about $10,000?

MR. MAC LEOD:
Yeah, it could vary between ten and $12,000.

LEG. MONTANO:
With the rebates.

MR. MAC LEOD:
Yes, with the rebates and the tax credits.

LEG. MONTANO:
In other words, out-of-pocket is 10,000.

MR. MAC LEOD:
Right.

LEG. MONTANO:
Okay. Thanks.

CHAIRMAN KENNEDY:
All right, Kevin, Legislator D'Amaro has a question and I have one for you, too.

MR. MAC LEOD:
Yes.

LEG. D'AMARO:
Yeah, just to clarify that, the rebates and the tax credits are over time.

MR. MAC LEOD:
The --

LEG. D'AMARO:
That's not -- if I go out and spend $70,000 and put a solar generation system on my home, I don't realize all the savings immediately. Right?

MR. MAC LEOD:
Right. The LIPA rebate of $35,000 you usually get within 60 to 90 days after the installation's completed in one check.

LEG. D'AMARO:
Oh, that's one check, okay.

MR. MAC LEOD:
Okay. The tax credits obviously you file at the end of the year, usually in March the next year and you get them within two to three months after that. And if you can't take them all in one year, you can spread them out over two years with the federal and five years with the state.

LEG. D'AMARO:
Those are dollar for dollar credits?

MR. MAC LEOD:
Yes. That's not a deduction. That is a credit. So if --

LEG. D'AMARO:
So called above-the-line credit.

MR. MAC LEOD:
Yeah, yes.

LEG. D'AMARO:
That's pretty good.

MR. MAC LEOD:
If you pay $5000 in taxes every year --

LEG. D'AMARO:
Right.

MR. MAC LEOD:
-- you can get the additional $5000 back in the taxes.

LEG. D'AMARO:
So all they need now is a program to finance the 70,000.

MR. MAC LEOD:
Right.

LEG. D'AMARO:
Right.

MR. MAC LEOD:
Okay.

CHAIRMAN KENNEDY:
Kevin --

MR. MAC LEOD:
Yeah.

CHAIRMAN KENNEDY:
-- just one other question. 10,000 watts is the maximum size that you can have for a residence. But what do you look at as far as average consumption for residents when you're sizing for residents?

MR. MAC LEOD:
Okay, well --

CHAIRMAN KENNEDY:
A three bedroom ranch, what kind of size do you need for that for an average family?

MR. MAC LEOD:
It's based on the customer's electric usage. So if there's justification of like 13, 14,000 kilowatts a year in electric uses, then you can justify a ten kilowatt system. You can go larger than a 10Kw system. It's just that the rebate from utility company ends at 10,000 watts.

CHAIRMAN KENNEDY:
Oh, I see. Okay.

MR. MAC LEOD:
Okay. So when we go in, we'll size the system according to what the electric usage is. The customer, either they want to do a 50% offset or if they want to do a 100% offset. In most cases, the 10 kilowatt system will offset almost all of the costs. For myself, in particular, I only pay $5 a month for my electric and that's for the whole year.

CHAIRMAN KENNEDY:
But, Kevin, does this also get into that notion then, and maybe I'm ahead of the game here, is this part of that reverse metering where you're actually throwing juice back on the grid?

MR. MAC LEOD:
Right. Yes, it's called net metering.

CHAIRMAN KENNEDY:
Net metering.

MR. MAC LEOD:
You actually sell electricity. Right now it's hot outside, the air conditioning's going. I'm selling electricity back for LIPA to use for other customers.

CHAIRMAN KENNEDY:
Okay. Legislator D'Amaro has another question.

MR. MAC LEOD:
Yes.

LEG. D'AMARO:
Just very quickly, are you familiar with the PACE Bonds Program that's moving through -- I think it's moving through the federal government right now?

MR. MAC LEOD:
The what?

LEG. D'AMARO:
The PACE Bonds.

MR. MAC LEOD:
No.

LEG. D'AMARO:
It's an acronym. I'm not sure what it stands for. It would assist local governments in financing the installation of a system like this similar to what's being done in Babylon where the cost would actually become part of your tax assessment to repay the loan in order to put in the system so it's transferrable with the property.

MR. MAC LEOD:
Okay.

LEG. D'AMARO:
Is that anything that you're aware of or can speak to?

MR. MAC LEOD:
I'm not familiar with that name, but it's commonly referred to as the Berkeley Model --

LEG. D'AMARO:
The Berkeley Model.

MR. MAC LEOD:
-- that you're referring to.

LEG. D'AMARO:
Okay.

MR. MAC LEOD:
And I well tell you that I did work with Assemblyman Englebright and Senator Thompson to pass a resolution that would authorize counties and local municipalities to offer these Green Loans. And we're waiting -- it's -- we're on third calendar call, we're probably not going to get it passed until January.

LEG. D'AMARO:

Okay. So you're aware of it and you support it.

MR. MAC LEOD:
Yes.

LEG. D'AMARO:
That would greatly enhance a homeowner's ability to install a system.

MR. MAC LEOD:
Yes.

LEG. D'AMARO:
Yeah, okay.

CHAIRMAN KENNEDY:
Okay. Go ahead.

MR. MAC LEOD:
Okay. So the contractor he'll -- initially he'll get a referral usually from -- either by phone or Renewal Energy Long Island. And he'll make an arraignment with a customer to go out and do an initial site visit. At that visit he'll evaluate the home to see if the customer's a suitable candidate. He'll determine if there's shading issues. That will lower the production. Determine the age and the condition of the roof and shingles. Obviously as a criteria anything older than ten years, you want to consider doing a re-roofing process because you don't want to have to take the solar off later on to change the shingles again, so do it now before you install the solar. You want to verify the direction of the perspective roof surface. Hopefully it's south, but east and west will work; not as well. Never do it on the north side.

To determine the size of the system as we talked about, appropriate to the customer's electrical usage, either they want to offset 50% of their usage or a 100%. A lot of customers like have that security of not having to pay the electric bills each month so they ask us, *can you size a system according to the most we can get up on the roof?* So we take all those into consideration.

We'll evaluate the electrical service in the home; see if it needs to be upgraded. And we'll, of course, discuss the pricing, the product types and the warranties involved in the process.

And just the little pictures down on the bottom there, that's a Solar Pathfinder, one of the essential tools we use in the industry. **{Indicating}** And I actually have a couple of samples of it on the table. I don't know if you'll have time later on to look at it. But the Pathfinder is on the left side there. It looks like a crystal ball. **{Indicating}** And the device that's got the cover open on the right-hand side is an electronic device -- an electronic version of that device, which is a -- the contractor uses to assess the shading issues on the roof. So with these devices we're able to get a percentage as far as what is considered to be worthy to install an installation or not. And if we're below that 80% rule, normally we recommend that the customer either cut the trees or they can't do the installation.

That's a little bright. **{Indicating}** I don't know if you can see that too

well but once we come to a, you know, we issue a quotation to the customer and the customer accepts the contractor, the contractor will do a preliminary layout of the system. And in this case here, there's two roof surfaces with the square areas -- where the solar panels are. **{Indicating}**.

And if the customer accepts that layout, we'll then go to contract with a customer and also do the LIPA application, which is about a five page, ten page document. It takes about four to six weeks to get the pre-approval from LIPA. On that we get the pre-approval letter, which is the letter in the lower right-hand corner that we get that -- that tells us the amount of the rebate and the size of the system. **{Indicating}** And it's basically a guaranty from LIPA that you have been approved to get that amount in the rebate. Once we receive that letter, the work can initiate after any point after that. Most contractors will not do the job without that letter.

So once we have that pre-approval, then we will move into finalizing the layouts. We will go and get any permits that might be needed from the local municipalities. We will contract -- the homeowner will contract with an engineer, such as Mr. Pacifico here, who will then do the drawings that would be sufficed for the engineering and the roof loading and the snow loading on a system. We will pay all the required fees, provide all the licenses that are necessary and the insurance.

{Indicating} These pictures here, actually you're looking at a layout that is engineered on the top. The multicolored items on the lower left is the string diagrams that -- how we tie the solar panels in together like you see in series like Christmas lights. And the picture on the right-hand side is the actual layout after if it was completed.

Once we're all ready to start the work, we will set up equipment and begin to mount the rails, the mountings and the solar panels. Step one: We would, you know, obviously do a trace, a measurement out on the roof, you know, of the actual layout that was agreed upon. Step two: We will mount these brackets into the roof, which we refer to as L-feet. And if you see on the table here -- I'll run over here really quick. **{Indicating}** This is the natural mounting here. This is a four-and-a-half inch lag screw that mounts into the roof beams through the sheathing. We place these approximately 36 inches apart and that's what the railing system that mounts the solar panels to actually connects to. And we actually have a layout that's already setup there on the table with the solar panel on it. The mid clamps, the end clamps and the rails.

LEG. MONTANO:
Kevin, can I ask a question?

CHAIRMAN KENNEDY:
Sure. Go ahead.

LEG. MONTANO:
Yeah, Kevin, when you say -- to apologize, you probably answered this, when you say *we* do this, you're talking about the contractor or are you talking about the Long Island Solar Energy Industries Association?

MR. MAC LEOD:
The contractor, the contractor.

LEG. MONTANO:
Right. You don't do the work -- the Association doesn't do any of the physical work. You just work with the contractors. You're like the union umbrella, or --

MR. MAC LEOD:
The Association is just a trade organization.

LEG. MONTANO:
Okay.

MR. MAC LEOD:
The contractor who may be a member of the trade organization is the one that actually does the work. Either it's LISEIA or IBW or {SECA} or whoever it might be, they're a member of a trade organization and they're the contractor.

LEG. MONTANO:
All right. Okay. So you have a list of contractors on your website that you work with on these kind of projects?

MR. MAC LEOD:
Yes. There's actually two listings. There's one that's provided by Renewable Energy Long Island. And there's also that's one that's listed on the site by LISEIA of approved and prescreened contractors.

LEG. MONTANO:
Okay. Thank you.

MR. MAC LEOD:
Okay. All right. So we'll jump right into item four there. **{Indicating}** Once we have the rails and these brackets in place, we then mount the solar module to the rails with what's referred to as an end clamp or a mid clamp. It's a little clamping device that actually engages into those rails. And once you rachet it down, it squeezes the module to the rail and holds it in place.

Okay. I actually had a couple of samples. **{Indicating}** These little devices on the end here, if you could see them, and I probably have some more, are the clamping devices that physically hold the module to the rails. And actually what I'll do is I'll take one off, why not? So everybody could see it. And if you want to just pass it around. It's light weight aluminum. These brackets could withstand wind blowing up to 125 miles an hour.

LEG. ROMAINE:
And how much would a panel like that produce in terms of wattage?

MR. MAC LEOD:
Okay. This is a SunPower demo module. This does about 110 watts. This is not relative to the size of the modules. Usually they're about three feet by five feet wide.

LEG. ROMAINE:
So this is more efficient.

MR. MAC LEOD:
Yeah, the SunPower module is probably the most efficient module on the market. It's about 18 and a half percent efficient. Most of the other manufactures, Sharp, Evergreen are in the 12, 13% range in efficiency. So in other words this module will take -- give you the most power generation for the least amount of space on your roof.

LEG. ROMAINE:
To produce 10,000 watts, how many panels would you need?

MR. MAC LEOD:
Okay, I'll tell you exactly. You need 44 SunPower modules, 230 watts each to give you a 10,120 watt system.

LEG. ROMAINE:
Or 22 for 5000.

MR. MAC LEOD:
About that, yes. To simply multiply 22 by 230 and that's what you're going to come up with.

LEG. MONTANO:
How much square footage of roof would you say that takes?

MR. MAC LEOD:
With the efficiency at 18 and a half percent efficient, we're looking at about 1850 watts per 100 square feet of roof surface.

LEG. MONTANO:
100 square feet of roof surface?

MR. MAC LEOD:
Yeah, about a 100 square feet of roof surface is about 1850 watts, is what it comes out to. Or, six -- well, yeah, then multiply that by --

MR. VAN NOSTRAND:
540.

MR. MAC LEOD:
-- yeah, is that right? Yeah.

LEG. MONTANO:
I didn't hear that. Would you say that again?

MR. MAC LEOD:
That's Sail. He's the solar contractor, he's my Vice- Chairman, if you want to --

MR. VAN NOSTRAND:
540 feet.

MR. MAC LEOD:
He's the math major here.

LEG. MONTANO:
I'm sorry, I didn't hear you. Can you repeat that?

MR. VAN NOSTRAND:
540 feet gets you a 10,000 watt system. Square feet, square feet.

LEG. MONTANO:
Thank you.

CHAIRMAN KENNEDY:
Legislator D'Amaro has a question and I have one, too.

MR. MAC LEOD:
Okay.

CHAIRMAN KENNEDY:
You going to go? Okay.

LEG. D'AMARO:
The $7 a square foot projected cost, does that include the soft costs, the documents, the permit process, the fees, all of that?

MR. MAC LEOD:
Some contractors build that into their prices. Some don't. Some actually have a flat part or credit they give on it. The reason some of them don't is because the permit fees vary so much from town to town. Like Islip might be $15 for a permit fee. And you go to the Town of Hempstead and they charge you a $1000 for a permit fee. So the wide disparity in the permit fees, some of the contractors don't want to try to absorb that whole point. So what they'll do is they'll say, *okay, we'll include $500 flat credit for the permits and anything more than that, the customer is responsible for*.

LEG. D'AMARO:
And you said about seven-and-a-half years you've recouped your investment in savings roughly?

MR. MAC LEOD:
That's right.

LEG. D'AMARO:
What is the lifespan of the equipment and what are the maintenance costs going forward?

MR. MAC LEOD:
Okay. Nobody's exactly sure what the lifespan is on the modules. We are assuming that they're going to be between 30 and 35 years, you know, we don't have any modules that have been out there that long. Most of them been installed pre-Gloria, I'll say Hurricane Gloria. But I will tell that the manufacturers of all the modules have warranties of 25 years or more.

LEG. D'AMARO:
Is there a maintenance required? Is there required maintenance and

upkeep or is it you put it up and forget about it?

MR. MAC LEOD:
Okay. Very little maintenance. If you choose to, you can go up there every so often and maybe -- light rinsing down of, you know, with some mild soap or something like that. But if you're in the case where it's way up on the roof and you can't have access that the glass of the modules is really a high polished anodized glass similar to what you would have in your car windshield. So usually any accumulation you're going to get in there washes off after the first really heavy rain. That's really all you need is the maintenance.

LEG. D'AMARO:
Okay. And one more question, does the installation of the system on a residence impact your homeowner's insurance premium?

MR. MAC LEOD:
Yes, it does. About $300 more a year. Obviously if you have what's called replacement plus on your insurance policy, which covers the whole aggregate value of your house, if worse case scenario it burns down to the ground or a hurricane blows it away, you want to include the cost of replacing the modules into that price, too. So usually when you add that in, with the -- the replaceable cost of the house, it costs you about 2 to $300 more a year.

LEG. D'AMARO:
Right. And the final comment I have is the tax credits are a great thing if you have tax liability. If you do not, then obviously you don't realize that benefit.

MR. MAC LEOD:
Yeah, that's the unfortunate thing. Low income families and senior citizens are probably not able to take advantage of the tax credits unless they have really good retirement plans. Yeah.

Legislator Montano left the meeting

CHAIRMAN KENNEDY:
Thank you.

MR. MAC LEOD:
Okay. So just on the final point at the bottom there, **{Indicating}** the electrician will connect the modules and the strings together, bond all the metal surfaces to ground. And I left my remote up there, sorry.

Okay. So the -- once the installation is pretty well completed, then the electrician will complete all the necessary wiring required to connect the system to the grid. He will route the DC voltage from the roof surface down to either the side of the house or the basement where the inverters would be located. He'll wire all the inverters. And that's -- we're talking about DC voltage here, 400 plus volts. It can get very nasty sometimes. The inverters, the square little boxes you see on the left-hand side **{Indicating}** are -- actually convert the DC voltage from the solar panels to 120, 240 volts, AC that's comparable for the usage in the home and also the back feed to the grid through the net metering system.

The utility usually within a week will come out and install a net meter, which is a little different type of meter, ones you're used to seeing with a dial. It's a digital meter. It's got a little green tag on it. It says net metering. And it's a little bit more accurate in recording. It goes both directions, forward and backwards, henceforth why they call it a net meter. The electrician also will complete all the grounding, necessary ID tagging of the equipment according to National Electric Code.

Actually there's a picture of a net meter right there. **{Indicating}** That little round device with the green tag on it that LIPA has installed.

Once the system is installed, completed, the electrician will file all their necessary completed paperwork for the underwriter's inspection, which is Jerry's job here. He comes out and he inspects the system for the underwriter's certificate. The utility company, LIPA, will install the net meter and the contractor will file all the completion paperwork with LIPA to initiate the cutting of the utility rebate check, which usually they will get within 60 to 90 days after the LIPA inspection is approved. And LIPA what they will do is they -- Legislator Romaine?

LEG. ROMAINE:
A quick question.

MR. MAC LEOD:
Yeah.

LEG. ROMAINE:
What impact does seasons have, for example, obviously June 21st is the sunniest day of the year and December 21st is the darkest day. What does that have on solar panels? What about cloudy days? For example, this past June we had rain just about every other day. What does that do in terms of generation of electricity? I'm just looking for the variables.

MR. MAC LEOD:
That's a good question. We get that from the customers all the time. There's actually several factors that we have to take into consideration. First we'll talk about the weather. The system's will produce power during cloudy days. They're just not as efficient as they are in the bright sunny days.

LEG. ROMAINE:
Right.

MR. MAC LEOD:
I will tell you this year was -- been a horrible production period for most of the PV customers because of all the rain.

LEG. ROMAINE:
June and July.

MR. MAC LEOD:
Okay. But one thing that a lot of people aren't aware of is PV panels don't produce as well in hot summer days as today as they would in a five degree, ten degree cold winter day in the bright sunlight. That's

because of the electron theory that heat is resistance and resistance prevents electron flow. So that cuts down on your production. So -- but the difference is, is that the reason they produce better in the summertime is because the days are longer.

LEG. ROMAINE:
Days are longer.

MR. MAC LEOD:
The days are longer and the sun is higher in the sky.

LEG. ROMAINE:
But in the winter for each hour of sunlight, you get more efficient production, but you don't have that many hours of sunlight.

MR. MAC LEOD:
That's correct.

LEG. ROMAINE:
All right.

MR. MAC LEOD:
Okay. So once the system is completed and the electrical inspections are all completed, the customer will be approved by the utility company to co-generate their system and back feed to the grid. And they will receive an underwriter's certificate similar to the one that's on the right-hand side.

That's really it as far as the grassroots installation of a residential system. If there's any other questions; if not we'll move onto our next speaker.

CHAIRMAN KENNEDY:
Kevin, actually --

MR. MAC LEOD:
Yeah.

CHAIRMAN KENNEDY:
-- Legislator D'Amaro has a couple of questions. And this is extremely informative. I'd like to do this all afternoon. The only thing that I'm going say to you is we actually just passed --

MR. MAC LEOD:
Two o'clock.

CHAIRMAN KENNEDY:
-- yeah, Public Work's was set to start five minutes ago.

MR. MAC LEOD:
Okay.

CHAIRMAN KENNEDY:
But let me turn to Legislator D'Amaro.

MR. MAC LEOD:
Okay.

LEG. D'AMARO:
Thank you. Just a general question and thank you for the presentation. We really need to over and over again hear this so we're informed and we can talk about it reasonably and rationally with people that may be interested in doing this. So this is very helpful.

What's the largest impediment to really moving forward? Is it the cost, you know, fronting the money or is it the building permit process?

MR. MAC LEOD:
Both, both. Obviously cost is an issue. Most of our customers that do it have taken in consideration about this over a period of time and have secured the loans. But the permits, the permits can be difficult. And I actually provided you with a manual that's taken the red tape out of Green Power.

LEG. D'AMARO:
The reason why I --

MR. MAC LEOD:
Yeah.

LEG. D'AMARO:
-- ask about the permits and I apologize for interrupting, but I know we're short on time.

MR. MAC LEOD:
Yeah.

LEG. D'AMARO:
This other booklet, the red tape booklet --

MR. MAC LEOD:
Right, yes.

LEG. D'AMARO:
-- I looked at some of these recommendations and, you know, doing away with building height limitations, over-the-counter building permits, I just from my own experience working within town government, I would have to believe that those are very difficult changes to implement at a town level.

MR. MAC LEOD:
It is -- some of the towns have become more cooperative. For instance, the Town of Southampton is not requiring permits for roof mounted systems. Brookhaven is considering the same type of system. Town of Islip has streamlined -- Town of Islip, Huntington, Babylon have streamlined their processes to make it a little bit simpler to get the permit.

One of the big problems we may have in the permitting process is the customer's illegal stuff. A lot of towns are reluctant to want to issue permit if they have like no permit for a swimming pool or deck.

LEG. D'AMARO:
It's always the case. Once the inspector's on the property, they pick up what they see. They're required to do that, yeah.

MR. MAC LEOD:
Right. So we've been trying to at least encourage the towns to don't ask, don't see, don't tell kind of process with that, if I might say that. That let's get the solar up there and deal with the other stuff at a later date. Let's not hold the solar up. I tell will you this, the Town of Islip kind of like went into that kind of idea by not having their building inspectors going out and doing their signoff on the job. The concern with the Town of Islip is to make sure that it's installed correctly and mounted. And so what they do is that they contract with this man here to go out and say, *yes it's installed correctly.* And he's the one that signs it off for the town.

LEG. D'AMARO:
Thank you.

CHAIRMAN KENNEDY:
Kevin, thank you. And in all fairness, you brought other folks with you.

MR. MAC LEOD:
Yeah.

CHAIRMAN KENNEDY:
Let's give them at least a couple of minutes --

MR. MAC LEOD:
Okay.

CHAIRMAN KENNEDY:
-- to go ahead and speak towards the balance of the issues, if you would, folks.

MR. MAC LEOD:
Okay.

CHAIRMAN KENNEDY:
Again, I just apologize we're really running seriously into Public Works.

MR. MAC LEOD:
No problem.

MS. CUNNINGHAM:
Good afternoon. My name's Kathy Cunningham {Veroni}. I'm the Program Director for Renewable Energy Long Island. We're a not-for-profit organization that does outreach and education to support renewable energy use and generation on Long Island.

I'm going to zip through my PowerPoint because it's a -- I know you're running out of time would, but zipping would require this to work. Here we go. RELI just -- this is my little speech about what RELI does. We're the only not-for-profit organization with an emphasis on promoting clean sustainable energy use. That's all we do. We have no

other interest.

One of the first things that we do in terms of our outreach and education, and it's something the County is already doing and should be congratulated on is to talk about efficiency. That there's much, much energy cost savings to be made by reducing your energy usage. It's the first step that the contractors generally do with the homeowners when they're about to install panels because the lower their usage, the smaller system they need. It's a money saver. Oh, there are my little graphics. **{Indicating}** So that's just how solar energy works. Kevin covered that.

I just wanted to demonstrate how seamless the connection is. The sunlight shines on the panels. The panels are wired to an invertor. The invertor's connected to your electricity box and presto chango, you're done, you don't even know that your house is being paneled by solar energy. This is a fascinating graphic. **{Indicating}** I have to show you this because people all say *well, Long Island, it's not Arizona, we're not in the sunbelt. Do we have the resource?* Yes, we have the resource. **{Indicating}** That -- the graphic on the right is actually the country of Germany where they have a feed-in tariff and that shows you the solar resource. The lighter colors are the, you know, lesser amount of sunlight the darker colors are the deeper ones. You can see in the southwest, it's very dark.

Our solar resource here in the US the -- **{Indicating}** you can see Alaska down there on the very bottom left and that's comparable to Germany. So Long Island has plenty of sunshine. This is something that can definitely be done here. As a minor fact, but something that people don't always understand, if we have a seven-and-a-half by seven-and-a-half square mile set of solar panels, it would power Long Island. Panels are actually green.

This is just to give you a sense of what the -- I just want to zip through this because Kevin already covered this, but this is a 5.3 kilowatt system. **{Indicating}** This is part of what RELI does in our outreach and education. We help the consumer, excuse me, through our Sunshine is Free site. We have a calculator on it. I would urge any of you that are interested for your own use or to refer anybody to our site, this gives you the basic calculations of how much it would cost for different size systems. You can plug in your annual electricity usage, which is a piece of data you can get from the Long Island Power Authority and it illustrates the tax credits.

The biggest news now, which Kevin has reviewed, but it's something we like to talk about with more enthusiasm, is that the tax credit was capped at $2000. In this instance this is a 7 kilowatt system that formerly you could only get a tax credit of $2000 and now it's up to $8,820. So that goes right back into your pocket; that $6000 it wasn't available up until recently.

I just wanted to touch on our contractor reference service. Remembering that RELI is a not-for-profit. We don't any particular interest in who consumers use, but we do offer a screening service to contractors who can be listed on our site. Consumers go to our site and then can contact contractors for an estimate by e-mail. It's a very easy

way to do it. Our site has plenty of information for consumers regarding solar panels. The panel here, the Consumer Protection Committee, you're a very savvy group, you asked a lot of really good questions, but it can be a fairly arcane process for people that don't know the difference between a watt and a kilowatt.

And the contractor network, these are requirements for the contractor to join the network. These are concerns that we have going forward. We're getting a lot of inquiries now because the solar industry is blowing wide open. We get calls in the range of one to three per day about contractors wanting to get into the solar business.

This is one of our other services that we offer for free. It's a green guide that helps consumers find renewable energy contractors on the Long Island area.

The solar tour is something that we sponsor every year with LIPA. It's a chance for people to go free of charge to visit home and business owners who have solar panels on their home. This is the number of Long Island Solar Pioneers in 2003. **{Indicating}** You can't see the yellow dots so well, but the comparison here to 2007, which is the most recent graphic I have, there are almost 2000 solar roofs on Long Island now, which is a very exciting thing. It's about half the quantity in the state. We have about half the installations in the State of New York. This is my mini quiz, which of these countries has the highest solar ownership ranked by household? And you'll be surprised to learn it's Kenya. The people there -- there's no grid but they buy these little panels and haul them around and pump water with them. It's pretty amazing.

LEG. ROMAINE:
And cell phones.

MS. CUNNINGHAM:
And cell phones, you're exactly right. Yup, that's what they have, cell phones, solar panels and then they live in a thatched hut, you know, it's pretty remarkable that technology meets rural living.

Net metering. Kevin touched on it. Some people are asking, but that's the ability to bank the energy you're using on a given -- you're generating on a given day to save for a day when you're not generating it. And after a twelve-month period, your assessment is done by LIPA. They call it a year-end annual assessment. And if you have generated more than you use, you'll get a teeny, teeny check for a small amount of money. And if you owe them a little bit they'll charge you. But basically that's it.

So these are our contact information. I have cards here if anybody's interested. I would urge you to refer your consumer questions to us. We're a good partner for what you're doing here. And I'm happy to take any questions you have. Thank you.

CHAIRMAN KENNEDY:
Kathy, thank you very much. I appreciate it. And, Kevin, who else do we have? Again, as I said, I would love to listen to every one of you all

afternoon.

MS. CUNNINGHAM:
That's fine.

CHAIRMAN KENNEDY:
But we really do have to move on for --

MS. CUNNINGHAM:
Just as a quick non sequitur, I wanted to thank Legislator Romaine and the rest of you for supporting the airport noise thing. I'm very active in airport noise in East Hampton, and man, we were really psyched when you guys passed that law.

LEG. ROMAINE:
The helicopter bill.

MS. CUNNINGHAM:
Oh, man, you got it.

LEG. ROMAINE:
We're working on its enforcement. And obviously the tragedy in New York City gives far greater emphasis --

MS. CUNNINGHAM:
Gives sad impetus. Absolutely.

LEG. ROMAINE:
-- because that is unregulated airspace.

MS. CUNNINGHAM:
Right, right.

LEG. ROMAINE:
And in New York --

MS. CUNNINGHAM:
It's a big issue.

LEG. ROMAINE:
-- one of the busiest airspaces around.

MS. CUNNINGHAM:
Yeah. I'll leave you my card cause I'd like to send you -- I live right near the airport. I'll send you my log from yesterday between six and eight.

CHAIRMAN KENNEDY:
Kevin, who else do we have?

MR. MAC LEOD:
Jerry Flaherty.

CHAIRMAN KENNEDY:
Okay. Can you give it to us quick, Jerry?

MR. FLAHERTY:
Yes, three minutes.

CHAIRMAN KENNEDY:
Okay. Thank you.

MR. FLAHERTY:
Five minutes.

CHAIRMAN KENNEDY:
Thank you.

MR. FLAHERTY:
My name is Jerry Flaherty. I'm an electrical inspector. I'm the Chief Electrical Inspector for Electrical Inspection Service. But I also do another thing. I'm also an instructor for photovoltages. I instruct at Farmingdale in the electrical training center. And I'm associated with LISEIA for two reasons: my electrical inspections, I inspect most of these systems and it's really necessary. These are high voltage systems. These are higher than any other voltage in the house. It's twice the voltage that you normally have.

So I'm just here to really support them and say that these systems are inspected. Electrically everybody gets very nervous about them, particularly firemen get very nervous about them. But they are very safe systems, even if they have high voltage, but they do have to be inspected.

The other thing I just want to talk about is the instruction part. They are -- I don't know many solar installers there are, but I teach photovoltages, but I also teach electrical topics. And the people in the solar industry almost all of them go to school, have, you know, knowledge based on what they're doing and, you know, I can only compare it to the electrical part where you don't see that. So, you know, most of them in the -- involved in solar, they're really dedicated people. And that's pretty much all I have to say to you right now.

CHAIRMAN KENNEDY:
Jerry, when you talk about inspection, you will inspect on behalf of whomever the municipality is? Or how does that --

MR. FLAHERTY:
Okay. How does it work, how does it work? Okay.

CHAIRMAN KENNEDY:
Yeah, what's that inspection --

MR. FLAHERTY:
Well, we actually do the inspection for the electrician.

CHAIRMAN KENNEDY:
Okay.

MR. FLAHERTY:
But all the different municipalities -- as I say, I'm the Chief Inspector for Nassau and Suffolk. Believe it or not, there's 106 building

departments on Long Island.

CHAIRMAN KENNEDY:
I believe it.

MR. FLAHERTY:
If each one of them -- they have to authorize us to do the inspection in that municipality. So our agency, I think we're -- we have, I think it's 93 of them that we're authorized to do the work for. Also, you know, Consumer Affairs does license the agency; not the inspectors, but the actual agency. So, okay.

CHAIRMAN KENNEDY:
Okay. Thank you very much, Jerry.

MR. FLAHERTY:
Okay. You're welcome.

CHAIRMAN KENNEDY:
And, Kevin, who's the swan song here?

MR. MAC LEOD:
One last speaker, Ralph Pacifico, he's the engineer for the solar contractors.

CHAIRMAN KENNEDY:
Thank you. Ralph.

MR. PACIFICO:
Hi, thank you. I'll be like Jerry, I'll be relatively quick.

CHAIRMAN KENNEDY:
Okay.

MR. PACIFICO:
I am Ralph Pacifico, Pacifico Engineering. I'm a licensed professional engineer. I've been supporting and working with the solar industry for a couple of years now. One of the things I did want to talk about, I know one of the questions that came up is relative to building permits and relative to the engineering involved. And I just wanted to give you really a little explanation of what that is.

On these residential systems, you're taking an existing roof and you're putting a new system on there. A lot of times I know the question comes up from the consumers is, *well, why do I need an engineer? I have an existing house, I'm just putting something on the roof.* And one of the key things you really have to concern yourself with is the building structural integrity. Some of the new houses, really not going to be much of a concern, but there are a lot of older houses on Long Island. There have been code changes over the years. And a lot of the code changes are relative to environmental loading; snow loading and wind loading. And houses that were designed 50 years ago were not designed to the same requirements.

When you're putting this system on, and Kevin had brought those examples there, you're putting a large, you know, big panel, works like

a sail. So if it does get captured by the wind, it can go flying off the house. And the key thing is the installation; the design of the installation. If you were to get into this and start looking at the manufacture's instructions, they give you a 20-page document on how to install a system. And it talks about wind loading and snow loading and faster size and faster frequency and how you should figure it out based on all these environmental loadings. And what they're doing is they're taking really a 40-page document put out by the code bodies, try to summarize it into two pages, but not really giving any of the background that's necessary with it.

So you really need to go through. And what I do is, like I said, I look at the structure. I look at the size of the system. I look at how it's mounted. And it's really a design of the fastening system and how it's put down. There are occasions where do have to actually increase the structure and do a little bit of framing work on the house to make sure it can withstand the weight of the system and the environmental loads that are being put on it.

One of the other key things, which Kevin had talked about specifically with the Town of Islip, and some other towns do this also is they're now having the homeowner have the ability to bring an independent inspector in. So similar to the way Jerry does the electrical inspection, they will allow someone like myself a licensed engineer or a registered architect to go and do the system inspection. So it may eliminate the need to have the town building inspector come to your house.

Just the real key thing and my key point is, you know, with these systems this is a fantastic industry. We're really at the forefront of it. I think with everything that's going on, it is a growing industry. With LISEIA and with RELI and with the contractors that are involved, as in all industries, there are some good and there are some bad. You have to be very careful with the way these systems are installed. The worst thing that could possibly happen is if we do have a windstorm and we have a half a dozen of these systems blow off people's roofs, it could destroy the industry.

So there is a very big concern that when these systems are done, they're installed -- they're designed correctly, they're installed correctly and they're inspected correctly so they do their job they're supposed to do and you get the benefit from it and they don't adversely affect, you know, the public health, safety or welfare.

CHAIRMAN KENNEDY:
Again, the points you bring up, Ralph, are very important and that's why we were very pleased to have you folks come to present to us today.

MR. PACIFICO:
Yes.

CHAIRMAN KENNEDY:
All of us always preach for use of licensed contractors. You heard the Commissioner here before.

MR. PACIFICO:

Yes.

CHAIRMAN KENNEDY:
And obviously we want folks who are conversant with installation --

MR. PACIFICO:
Right.

CHAIRMAN KENNEDY:
-- whether it's by virtue of formal education or -- I know a few electricians in my time that know a thing or two about installation.

MR. PACIFICO:
Right. Okay.

CHAIRMAN KENNEDY:
So I would suggest to you that please keep us informed. And we thank you for being here. I wish that we could afford you more time.

MR. PACIFICO:
Okay.

CHAIRMAN KENNEDY:
But again as I said, we've gone well into Legislator Beedenbender's time. Thank you all. Kevin, thank you so much. Thank you all for coming, we appreciate it. And we look forward to hearing from you soon.

MR. MAC LEOD:
Thank you. And if any of you would like us to come into your district to actually do a district presentation for your constituents, we'd be glad to do that.

CHAIRMAN KENNEDY:
That's wonderful. Thank you so very much.

Okay, folks. Thank you very much. I guess we'll make a motion to adjourn. We're adjourned. Here we go. Thank you very much. We appreciate it. Bye-bye.

THE MEETING CONCLUDED AT 2:29 PM

{ } DENOTES SPELLED PHONETICALLY