NEW JERSEY BOARD OF PUBLIC UTILITIES

ENERGY MASTER PLAN

PUBLIC HEARING

AUGUST 11, 2011, 1:00 P.M.

RICHARD STOCKTON COLLEGE, POMONA, NEW JERSEY

BEFORE: LEE A. SOLOMON, President

JEANNE FOX, Commissioner

NICHOLAS ASSELTA, Commissioner

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PRESIDENT SOLOMON: Good afternoon.
This is the continuation of the public hearings regarding the Energy Master Plan. We have many people in attendance today so please place your name on the sign-in sheet and we will call you in the order that you have signed in. If you are reiterating what someone else has already said, rather than take up time that might preclude someone else from speaking, let us know, we will be reviewing the transcript and we will have a chance to review that.
081111_Transcripts

Our first speaker is Dr. Harvey Kesselman, Provost of Stockton College of New Jersey.

PROVOST KESSELMAN: Good afternoon.

On behalf of President Saatkamp and our Board of Trustees, I'd like to welcome everyone to the Richard Stockton College of New Jersey for today's Energy Master Plan open public hearing. Stockton College is proud to host our fellow State residents as well as Commissioners from the New Jersey Board of Public Utilities.

Energy Master Plans are crucial for the development of the State's long-term energy policies. Most certainly, the public's awareness and feedback is essential to this process and we thank you all for being here today.

With our unique location within New Jersey's protected Pinelands National Reserve, Stockton is fully supportive of alternative energy systems and sustainable designs.

Thanks to funding from the Board of Public Utilities, we have one of the largest solar carports in the country, capable of generating nearly 850 kilowatts.

Adding in our rooftop solar panels, our college has 1.2 megawatts of solar generating capacity. To support the current phase of our solar project work, we are utilizing 3.46 million dollars in funding from the Board.

This represents the single largest grant for a construction project in Stockton's history,
and, over the next six months, we expect to boost our solar capacity by another 1 megawatt with additional solar panels installed at the parking areas within our North Residential Housing Complex. In addition, our brand-new Campus Center features a number of environmentally-friendly benefits, including:

- The heating and cooling system runs about 30 percent more efficient than standard construction;
- water use is about 40 percent less than average, and; low-emitting paints, coatings and adhesives were used throughout the building.

These features, among many others, are being documented as part of our efforts to achieve LEED certification.

We'd like to thank the residents of New Jersey for their continued support of Stockton as well as the Board of Public Utilities which has generously provided the financial resources necessary to make Stockton an academic leader in alternative energy and sustainable design.

Thank you.

PRESIDENT SOLOMON: Thank you.

I see Senator Whelan is here. I will ask Senator James Whelan to please come to the podium.

SENATOR WHELAN: First of all, on behalf of South Jersey, we are very grateful that you have come to Stockton in South Jersey to give us here in
South Jersey an opportunity to participate directly in these hearings.

We have an enormous challenge in this country and in this State in terms of energy. That challenge very simply is that we as a nation, quite frankly, are behind the rest of the world. Europe is well ahead of us in terms of off-shore wind. England and Denmark, they spout windmills the way a field sprouts dandelions.

I read a book recently called "Making it in America" by Andy (inaudible) who is not a, does not come from an environmental background, he is the Chairman of the Dow Chemical Corporation, and he tells us that China spends ten times more in renewable energy development than the United States does; such a huge challenge.

We have done a lot of good things in New Jersey and this plan calls for the continuation of many of the good things. Certainly the SRECs legislation made us number 2 in terms of installation of solar panels.

The problem is that while SRECs leads to a lot of solar panels and solar installations to be created in New Jersey, the odds are that those panels are being manufactured in China or Europe or somewhere outside not just New Jersey but outside of this country.

Similarly with windmill production, we lag behind, like I said earlier, the rest of the world. Particularly for us in South Jersey I think while it
is a challenge it is also an opportunity.

We once upon a time had a thriving glass industry in South Jersey, hence, Glassboro.

We also had a thriving boat industry. You can literally from here within five minutes go to boatyards that are padlocked. At those boatyards they used to work with fiberglass, exactly what the windmills are made out of.

So I would hope and while I recognize and acknowledge that last year the Governor signed a bill creating a hundred million in stimulus into job creation of renewal energy, I would hope that that is something that we would look at, particularly for the small manufacturers.

The concern I have is that the hundred million when we develop the port at Paulsboro, when we develop the port in North Jersey to run the windmills out to where they would be, miles out at sea--By the way, for the record, speaking as a resident of Atlantic City, we welcome windmills off our coast, and in fact Stockton did an analysis that showed not just Atlantic City but Atlantic County, the coastal communities welcomed windmills off our coast.

So we welcome them but we also would welcome them that much more if those things were in fact manufactured right here in Atlantic County, New
I was at a conference last week, and I have not had time to verify this, but one of the things that came up is you can save twenty percent of your cost of a windmill, an off-shore windmill project, if in fact the product is produced locally instead of buying it abroad and shipping it here, if it is manufactured here and doing the final touches on-site.

I know there are many other speakers.

Again, we welcome you. I just hope we can find a way to stimulate the jobs that small manufacturers will bring in terms of manufacturing for glass, windmills and any other technologies that come along.

PRESIDENT SOLOMON: Thank you, Senator.

And part of the legislation that you were a part of does provide for that, that is one of the analyses we will have to do, is the positive economic impact and what opportunities there will be in New Jersey in assessing where we go with off-shore wind, so that will be an important complement.

So I appreciate your time. It's good to be in Atlantic County.

SENATOR WHELAN: Thank you.

PRESIDENT SOLOMON: Thank you.

Fred DeSanti.

MR. DE SANTI: Good afternoon, President Solomon and Commissions and members of the New Jersey Energy Master Plan.
My name is Fred DeSanti and today I'm pleased to be representing Frank DiCola, President and Chief Executive Officer of DCO Energy, which is in partnership with South Jersey Industries and proudly headquartered here in May's Landing.

DCO Energy has and continues to play an important role in the development of a number of important cogeneration landfill gas to energy projects in New Jersey that has worked to save energy, reduce carbon emissions and helps spur employment by assisting New Jersey's businesses, government and institutions reduce energy costs and become more competitive with neighboring regions.

Projects supporting major New Jersey employers like DCO Energy's prior cogeneration facilities helping Geon Industries in Pedricktown, our Vineland Municipal facility supporting the thermal energy needs of Progresso Foods help make New Jersey businesses more energy efficient and cost competitive.

Close by, New Jersey casinos also employ state-of-the-art cogeneration infrastructure like our Marina Thermal project at the Borgata Government facilities, saving cost and energy include our Essex County Correctional CHP, landfill gas collected and producing electricity at Atlantic, Burlington, Salem, Sussex and Warren Counties, our solar installations for the City of New Brunswick and Seabrook Farms.
All of these facilities would not be possible without the policy support of New Jersey and we want to commend the Board and those who worked hard to create this draft report for their continued endorsement and the policy framework necessary to carrying these energy and cost savings technologies far into New Jersey's energy future.

The plan's goal of developing 1500 MWS of distributed generation combined heat and power is ambitious, but clearly tractable and will challenge our industry to seek high quality applications that will minimize the economic and environmental net benefits. Clearly, it is not unreasonable to undertake net benefits evaluations to prove that projects are aligned with our State's energy policy goals.

We support that as well because we know that combined heat and power projects enjoy high capacity factors, virtually double the efficiency of natural gas utilization and displace far higher carbon intensive technologies while simultaneously reducing grid congestion and producing other distributed generation benefits to our State EDC ratepayers.

We also are very pleased to see the Energy Master Plan' support for an emerging new sector of combined heat and power that can create district energy systems to help our State's major urban areas. District energy systems can be of significant value in reducing energy infrastructure capital.
replacement costs for government and educational facilities and significantly improve energy efficiency, lowering operating expenses now and into the future.

A number of feasibility studies are now underway throughout the State and we look forward to working to develop these vital resources, particularly at this time when the economic and job creation impacts would be most welcome. After all, our cities will always have needs for hospitals, universities and institutional support facilities. These needs will never go away and neither will the need to see that those facilities run as energy efficiently and cost effectively as possible.

As the report also correctly observes, however, the development of these projects requires some reasonable financial and process support. However, these support systems need not be necessarily grounded in expensive grant programs, as far less costly vehicles like county improvement authority tax exempt lease-back programs, revolving loan programs, loan guarantees and streamlined permitting can go a long way to supporting the development of these projects.

We would be remiss if we did not recognize the support of the Governor and our Legislature in creating laws that facilitate the movement of CHP power, reconcile sales tax implications on primary fuels and the sale of electricity across property.
lines within the thermal loop. Reconciling utility standby charges across utility boundaries, virtual net metering proposals that will help balance thermal and electrical output and other forward-thinking proposals now being considered will also be of great assistance in meeting the goal of 1500 MWS of new combined heat and power capacity by 2020.

We support the recommendations regarding the capacity market and new construction of base load facilities to both improve our environmental profile and that seeks to replace older technology with far greater heat rates and utilization of natural gas. We support the recommendations and endorsement of natural gas as perhaps our mosty valuable and available fossil resource that will be needed to reliably carry us well into the future.

We would also like to, finally, observe that the overall recommendations of the Board regarding our State's solar energy and renewable programs correctly recognize the economic realities and dysfunctional consequences of building large capacity "grid based" projects that can wash out far more deserving and higher quality solar applications that create distributed generation and energy discount benefits to New Jersey's consumers and particularly those residential projects.

Clearly, Board review of projects over 10 MWS is needed, as is envisioned in A-2529. We also think that the program's rapid success over the past
year in particular should give rise to some
consideration to evaluating the 2013 SREC market in
as much as it is critical to the industry as a whole
for business continuity reasons. We would ask,
therefore, that you appropriately consider the
potential consequences resulting from the coming
confluence of the significant overbuild concurrently
with the anticipated loss of Federal ITC cash
funding in 2012. This looming threat is of
considerable concern.

While we would like to go on to discuss
our ideas involving biomass, energy efficiency
credits and some related issues involving public
contracting laws, we will preserve those issues for
our written comments in deference to your difficult
schedule today and others who wish to participate.
Our brevity, therefore, is our best way of saying
thanks to all of you for a job well done and a
policy framework that we look forward to working
within for many years to come to build those CHP
projects that the State needs.

Thank you for your time and attention. We
look forward to working with you to implement these
policies.

PRESIDENT SOLOMON: Thank you, Mr.

DeSanti, and especially thank you for being brief.

Dr. Ed Salmon, a former President of the
BPU, but we still spell our names differently and were we are not related.

DR. SALMON: First of all, let me welcome you to Stockton College. I have the honor to serve as Chairman of the William J. Hughes Center for Public Policy here.

And there are just great things going on in Stockton College and energy certainly is one of our big issues in public policy, maybe one of the largest we face in this country today.

I have a great admiration for this Commission, I think this Commission works hard together, works on solving the problems and works on working with the administration to make sure we achieve common goals, and I salute the Christie administration and the BPU for this balanced approach you are charting in a critical course for New Jersey's energy needs.

Because electric use is one of the largest expenses for business and industry, I am pleased to see that the number 1 overarching goal of our Energy Master Plan is to drive down the cost of energy for all customers, and I think that's a proper overall number 1 goal.

I know, I had the pleasure when I was on the Commission in '92 to do that Energy Master Plan and I know the hard work it takes to put all of the pieces together to be able to get something that will be successful in the future.

I am also pleased that the Energy Master
Plan focuses on pursuing a mixed basket of options, because I think a mixed basket and putting everybody in that basket is so important, whether it is nuclear, natural gas, renewable energy efficiency or innovative technology.

There are four points I would like to talk to you about that I think are specific points that I would like you to give some consideration to.

First of all, I will talk a little bit about nuclear. Nuclear energy plays such an important role in New Jersey's energy supply, I think last year it was 51.8 percent of our electric needs, I was pleased that the administration continues the support of nuclear, especially due to the fact that we going to need to replace Oyster Creek's lost capacity when they close.

A new nuclear facility will create jobs, improve system reliability and help us achieve our greatest greenhouse gas reduction goals. So the direction that the Master Plan takes on nuclear I think is right on track and going in the right direction.

The second issue I want to talk about is infrastructure. I think we are all familiar because we have been at all of the conferences of the real importance of replacing infrastructure that is long overdue, and I think we need to look at innovative programs.

The Commission especially has to look at
innovative programs, whether it be electric, natural
gas, water, of how we are going to replace
infrastructure. It is probably one of the biggest
challenges we face in our nation today, not just in
New Jersey.

The third area I want to talk about is
SRECs. I think we all have been following what is
happening with the SRECs for solar, and there has to
be quite a concern because of the nasty drop that we
just had recently. I think there should be
consideration to putting a floor on the value of
SRECs, a floor that may be similar to the State of
Massachusetts that put a floor of two hundred and
eighty-five thousand. You are not going to get

investors, you are not going to build the solar
industry, the solar industry isn't going to stand
unless we have a floor that would be some validation
of what investors know to expect. And I think that
may be a direction that the Board may want to
consider.

The second thing, I have been involved in
a lot of solar projects around the State, we were
involved in the first one for Toms River Regional
High School, and I know that Commissioner
Fiordaliso went up to visit and saw the tremendous
advantage that has given to that educational
district; it is really one of the models of success.
We have a lot of models of success right
now in the State of New Jersey.

I am really concerned that we make sure
that we are benefitting all of our citizens in the State when it comes to solar, particularly governmental, educational, health care facilities, enabling those entities to install solar, providing a great value in sending those lower costs on to the taxpayers.

What I would like you to consider is maybe we need to look at establishing a three tier system, maybe a four tier system. I think tier 1 would be projects that are for the public good, schools, colleges like here at Stockton, hospitals and government. The last thing we need to do is to have the educational institutions of our State, to have the colleges and to have the hospitals all tied to solar and then find that they can't interconnect, so there has to be some provision for those kind of facilities.

I think the second tier would be commercial and industrial projects where they are using the solar right on the location of where the facility is; In other words, they are helping to drive down the cost, to make it easier for the consumer to buy.

And the third would be brown-fields, landfills and large non-agricultural development. In my way of thinking, this is going to be important as you go forward.

I just think that we are looked upon as the leader in the nation along with California in
solar and renewables, I think it is a position that we want to continue in, but I think we are going to have to adjust and make some of these changes in order that we can move forward and aggressively continue to be able to provide relief to taxpayers when we talk about government, when we talk about education and the tax bills that are paid or relief to patients when they go to the hospital so that they can reduce their health care costs by a million dollars since we have been able to install solar.

With that I want to thank you for the dedicated efforts you give to the State of New Jersey. I know the hard work involved in everything that you are doing to put this Energy Master Plan together. I know working together we can get an end product that will move this forward and bring the State of New Jersey forward.

PRESIDENT SOLOMON: Dr. Salmon, I have one question. You mentioned a tiered system and from what you said I am assuming it's a tiered system in terms of what is first in line for approval and public good which would be number 1, versus a tiered system tiering SREC values or floor prices or whichever?

DR. SALMON: You are one hundred percent correct. I am glad you said that because that's the intent.

PRESIDENT SOLOMON: Because we are going to hear either now or later ideas about floor pricing, tiering SRECs and thing like that and
didn't want there to be any confusion.

DR. SALMON: I think my real concern was a fast-track approach for government, education, schools, colleges and hospitals, anywhere we are serving the public and reducing the cost to the public, whether you are a taxpayer or consumer.

PRESIDENT SOLOMON: Thank you.

Matt Davey, Petra Solar.

MR. DAVEY: Good afternoon, President Solomon, Commissioners and Staff.

My name is Matt Davey of Petra Solar, a clean technology company headquartered in South Plainfield, New Jersey.

A VOICE: Can't hear.

PRESIDENT SOLOMON: Please keep your voice up because we don't have the mikes so that everyone can hear you and also make sure that you take your time so that the Court Reporter can get everything down.

Can everybody hear me when I speak, I hope? I am kind of loud, aren't I?

MR. DAVEY: Our company can demonstrate the positive impact that the progressive renewable energy policies here in New Jersey have had so far on our business and how they have promoted job creation and technology development in the State.

Because of the State's renewable energy
policy, specifically the RPS, the SREC market, Petra Solar is now installing our innovative Sunways Smart Solar system which combines solar energy generation with smart grid technology and the deployment of forty megawatts to Public Service Electric and Gas.

Using New Jersey's electrical capital, Petra Solar alone has grown from fifty employees in 2009 to 170 in 2010.

On behalf of Petra Solar I would like to offer the following comments in six areas of the New Jersey Master Plan.

First, the SACP: It is critical for the New Jersey solar market to have certainty in the forward-looking schedule of the SACP in adopting firm SACP schedules through the end of 2026 to allow the market to fully operate and flourish, enabling stability and economic growth.

Secondly, the RPS. At Petra Solar we support the goals of the RPS and understand that in the 2011 Energy Master Plan this obligation is set at twenty-two and-a-half percent.

We also support the administration's view that this is a floor, not a ceiling.

Thirdly, solar and reliability: Projects that offer a dual benefit such as distributed smart solar technology that combine building a smart grid infrastructure for distribution utilities with reliable utility grade solar energy generation should be used at projects that have enhanced value.
to ratepayers.

The benefits of distributed smart solar technology exceed those of traditional solar technology and provide cost benefits that become apparent when evaluating the multiple benefits and expanded application opportunities possible.

Because of their intermittent characteristics, solar energy sources can cause fluctuations on the utility's electric grid, thus destabilizing the grid. The solution is to start with distributed generation first where the load is; thus, negating the need to build transmission and distribution infrastructure and mitigating the intermittent issues by dispersing the generation over a large number of circuits rather than on one, in addition, distributed deployment reduces the losses incurred through transmission and distribution.

Technologies developed through funding by the U.S. Department of Energy under the (inaudible) program defines specific technical attributes that should be deployed to make forward, more reliable cost effective parts of the energy mix.

For these reasons, utility owned distributed and solar projects coupled with strategic smart grid technology are the best insurance against grid instability, a problem that ultimately increases the cost to ratepayers.

Fourth, the cost of solar energy: When
evaluating the cost of solar energy versus other
energy sources, the Federal subsidies associated
with fossil fuels, the exception of fracking from
the Clean Water Act, the environmental and health
benefits of clean energy, including CO2 reduction,
and job creation and resulting indirect economic
benefits should be considered.

Fifth, smart grid: Renewable generation
that also brings smart grid technology to the
utilities helps mitigate electric grid reliability
issues and enhances future expansion to other value
added applications which benefits utilities, the
State's economy and ratepayers.

For example, grid reliability with smart
solar technology helps keep voltage stable during
cloud passes.

Expanded smart grid application includes
voltage conservation, outage management, demand
response and streetlight control.

Lastly, storage: Significant work has
been completed in the industry to specify and
quantify the benefits of storage application to the
electricity utility grid. Three reports from
(inaudible) International Labs and Southern
California Edison detail these benefits and their
beneficiaries.

These studies clearly indicate the value
of energy storage from generation to the end
customers, including the energy market. The
cutting edge of clean energy technology is energy
storage, and we urge the State to continue with
leadership as to this technology as it has gone
forward.

In closing, policies which promote
generation of clean, renewable, smart solar power
along with public and private partnerships that
leverage State assets will put New Jersey's
residents to work and induce local economic
development as well as implement a sustainable

smarter, more reliable electric grid and update our
infrastructure to meet the needs of the 21st
Century.

Thank you for the opportunity to be here.

PRESIDENT SOLOMON: Thank you.

Are we at the stage yet or when will we
be at the stage, if you know, when the information
will begin to get transmitted to the utilities
directly; has that been worked out?

MR. DAVEY: Well, we are in the
construction phase of the project, we are a little
over halfway through, and the way the system is
designed, once the panels go up then you look at
where they are and do the communication network
afterward. I would say that we are currently
twenty-five percent with the fifty percent of the
panels out there of getting them all communicated.

PRESIDENT SOLOMON: Time-wise, what are
we looking at?

MR. DAVEY: I can get back to you on that,
I don't want to speak on behalf of PSE&G behave.

PRESIDENT SOLOMON: On that, please.

We would be interested in getting that information because that factors into some of what we are doing, but also on the storage side—and I don't mean to tread on Commissioner Fox's things because that is her, one of her missions is the storage issue—the storage technologies that are out there and available, because that is a game changer for solar and wind.

In fact, we have our first pilot program subsidized—that's a bad word these days -- but supported by the BPU's Clean Energy Program that is a storage program.

So if there are other technologies or other opportunities we would like to hear about them, and we would like to be able to refer to them either, if not part of our Master Plan, at least have our Working Group look at.

MR. DAVEY: We will submit comments.

PRESIDENT SOLOMON: Great.

Marissa Travaline, South Jersey Industries.

MS. TRAVALINE: Good afternoon, President Solomon, Commissioners Fox, Asselta and Fiordaliso.

My name is Marissa Travaline and I am the General Manager of Government relations for South Jersey Gas Industries.

South Jersey Industries is a publicly traded energy holding company that is parent to
South Jersey Gas as well as South Jersey Energy
Solutions, which is comprised of our un-regulated
subsidiaries. South Jersey Energy Solutions
companies specialize in energy services ranging from
CHP, thermal plants and cogeneration to large-scale
solar arrays and residential and commercial HVAC
service

Thank you for the opportunity to testify
here today. Although South Jersey Industries
previously commented publicly in Newark, we thought
it was important that we be here today in our home
county on the Stockton College campus to offer our
support once again for the Master Plan.

Thank you, President Solomon and the Board
for your continued leadership on this plan. I'd
also like to thank Governor Christie, Lieutenant
Governor Guadagno and DEP Commissioner Martin for
their leadership.

PRESIDENT SOLOMON: Take your time. I
can't listen that fast, you have to slow down. I
know people tend to yell and rush because it's hard
to get information to us, but take your time. It's
okay to yell but please don't rush.

MS. TRAVALINE: This is our backyard, this
is where we do a lot of our work.

We were very happy to see inclusion of
Marcellus Shale gas in the Master Plan.
Based on its availability of supply, price stability and environmental benefits, we firmly believe that natural gas can and should be the centerpiece of the Energy Master Plan. In conjunction with renewable energy resources, natural gas fired generation and combined heat and power, also known as cogeneration or CHP, have a critical role to play in supporting the energy needs of our State. As you know, CHP is a highly efficient form of electricity generation using waste heat to produce steam or hot water for manufacturing processes or space conditioning purposes.

As a New Jersey leader on CHP and cogeneration facilities through our subsidiary partnerships in Marina Energy and Energenic, we've long advocated the benefits of distributed generation fueled by cleaner burning, cost-effective natural gas.

For the past ten years our Marina Thermal facility provides heating, cooling and both heated and chilled water to the guests of Borgata Hotel Casino and Spa in Atlantic City. This technology continues to deliver considerable efficiency and cost savings over traditional HVAC systems, providing electricity to power the thermal plant and reducing the demand on electric transmission and distribution systems.

As highlighted in the proposed Energy Master Plan, distributed generation and CHP resources improve system reliability and utilize...
fuel more efficiently, particularly for commercial and industrial customers, where the net income and environmental benefits can be more quickly realized.

We remain engaged as well on the specific strategies advocated by the Energy Master Plan surrounding energy and biomass, cogeneration and proliferation of CNG vehicles. Additionally, we support the adoption of a responsible strategy for extracting natural gas from the Marcellus Shale and are very pleased by its inclusion in the Energy Master Plan.

As you know, the proximity of this reliable, abundant and cost effective resource will enable New Jersey to use Marcellus Shale natural gas to support our State’s energy needs for some time to come. Shale gas will help level the playing field for manufacturers in New Jersey using gas as a fuel source, creating incentives to locate new manufacturing and industrial business here. It will stimulate the new power generation technologies that have a critical role to play in achieving energy efficiency requirements. It will improve reliability from a secure supply, reducing the risks of interruptions due to weather, effectively helping to drive down consumer costs.

And finally, perhaps most importantly, this resource has proven its potential to jump-start economic development and spur job creation through pursuit of the infrastructure
needed to accommodate transmission.

Through our regulated utility, South Jersey Gas, we are leading the way on compressed natural gas technology as we are currently constructing one of the first quasi-public CNG filling stations in Southern New Jersey in the City of Glassboro. We are optimistic that this station's construction will be completed and operational by year's end. As we look to expand this technology to the benefit of our State's residents, we do so bolstered by the Energy Master Plan that recognizes the value of expanding the natural gas pipeline system to strengthen the potential for innovations in transportation fuels.

South Jersey Industries remains committed to partnering with the State as well as with our local government entities, our large commercial and industrial customers, our small business owners and our residential customers in New Jersey and beyond to achieve their goals for energy efficiency, cost savings and reliability in supply.

In closing, I'd like to thank you for your leadership and for the opportunity to comment here today.

PRESIDENT SOLOMON: Thank you.

Paula Gotsch.

MS. GOTSCH: I see you did a smart thing, Dr. Solomon, you are sitting down and we are standing.

GRAMMES are grandmothers and mothers for
renewable energy safety. We have been involved in
research for twenty years, we are the ones that
fought the Oyster Creek relicensing and we were
told by the University that it was through our
intervention that they found out a lot of things
wrong with that plant and so they moved the
inspections up instead of once every ten or twenty
years.

I have read Governor Christie's press
release statement, and I was glad to hear that he
talked about that he knows so much about smart grid
and all that will come with that, the jobs that
will come with the smart grid.

I wasn't so crazy to hear him talk about
pie-in-the-sky options, that we have to have nuclear
and all these other things, that we just can't rely
on pie-in-the-sky.

Going back thirty years, I want to talk
about pie-in-the-sky, thirty years ago renewable
energy people were saying that the cost was going
down on renewable energy. Let's see how that turned
out.

In the last twenty-one months alone wind
energy people have gotten 9,400 megawatts running
in this country.

Solar, we all know the prices on that are
dropping rapidly, and we talked about storage, and
as we learn more about storage in New Jersey we'll
be able to do a lot more with it, and energy
efficiency, so those are some of the renewables and
some of the efficiencies.

Now we have to go on the nuclear side,
let's see what they have done in the last thirty
years.

Back in 1960 they were saying, the nuclear
industry was saying, "We are going the build a
thousand new nuclear plants by 2000." How many new
nuclear plants are there? Zero. Translation:
nuclear pie-in-the-sky.

Now I am going to use local information to
show how that works. I will go to Texas, 693
megawatts, two nuclear projects cancelled because
of costs and problems getting funding.

On the other end of that, the Texas
Environmental Quality Commission was cited for
hiding the fact that there was so much radioactivity
in that area of Texas, this came out in May, the
members of the government were in collusion with it,
the amount of radiation in their drinking water. So
much for safety of nuclear energy.

At Texas A&M, among students in the
Nuclear Department, it's nto as cool as it used to
be check, supposedly if we wanted to go ahead with
nuclear, which it is pretty obvious that we can't,
we need twenty-five thousand new nuclear units to
replace all of the retirements in nuclear plants,
they are saying when they are asked, "What are you
majoring in?"

"I switched, I am going to study medicine
instead." People have a strange way of not wanting to hurt anybody.

And then I will just skip to North Carolina. Duke Energy was going to build two nuclear projects, the North Carolina Utility Commission on April 9th said that construction costs and nuclear spent fuel storage is too risky and they will not put forth a CWIP bill, construction work in progress, in other words, they put the cost of nuclear construction on the bills ahead of time and then the ratepayers, of course, absorb everything, the delays, et cetera.

CEO Jim Rodgers of Duke Energy says, "I can't build all these projects without CWIP because nuclear projects are so risky"; that's the President of Duke Energy saying that.

Globally, remember Atomic Annie? She was fired mainly because the two plants being built were behind schedule.

Germany plans to close down their reactors by 2016.

So I think, just talking about rumor, you know, if people keep thinking they can, they keep saying, I have heard people at these meetings get up and say, "We have to have nuclear."

When you think of all of the things that are not solved with nuclear energy because of...
concern about the fact that there are so many tons of nuclear waste in New Jersey and people want to know why, they want to know why they wanted hot storage, which is where nuclear casks are stored because right now those casks are vulnerable.

The other thing that is interesting is that MIT got a thirty-nine million dollar grant to study how we can fortify these casks because they are looking at long-term storage on-site.

And so we are looking to see how we can make casks safe. Why they are going to look at that, that means that they are not safe. They are looking to figure out how to make it safe for a hundred years. They have to have radioactive materials that are going to be safe for hundreds of thousands of years.

I was at a meeting where the Mayor got up and said, "We love the nuclear plant but what is going to happen to that waste?"

I do disagree with the statement that we should not pick winners and losers. We should pick winners and losers, we should pick sustainable energy, we should pick the most economical ones and there is no need--for the people that say we need the whole mix, we don't. We need to go with sustainable energy, energy that is going to be good for our kids in the future.

Thank you very much for your attention.

PRESIDENT SOLOMON: Thank you.

Richard Colby.
MR. COLBY: I would like to make two hopefully constructive criticisms to your Energy Master Plan.

PRESIDENT SOLOMON: Constructive criticism is always welcome.

MR. COLBY: First, I think it is a disservice to the word "energy," we are being told it is the Energy Master Plan whereas it is in fact an electricity master plan. It devotes one paragraph to transportation, the largest single sector of the energy economy, so what you say basically is that you don't know how to deal with that.

PRESIDENT SOLOMON: There are a few paragraphs about gas.

MR. COLBY: But it is the largest single component sector of the entire energy economy, and basically you are saying you don't know how to deal with it. That is not surprising if you are an energy agency, which is what the Board of Public Utilities is.

You might have considered declared a component of a Master Plan dealing with energy. The transportation sector uses primarily petroleum, which is a very bad greenhouse gas producer. If you think about how you could reduce the number of cars in New Jersey and in the world I think you would have to figure out that major changes need to take place in society, such as...
getting rid of the suburbs, but we can begin to have
a society that reduces the amount of energy needed
for transportation.

The second statement I would like to make
is that the prime goal of your plan, which is to
drive down the cost of energy for all customers, is
truly not the role of government; that's the role of
the free market to regulate prices of things.

What the Board of Public Utilities should
be doing and what it traditionally does is to limit
the profits made by a natural monopoly, which is
what electricity is.

I would like to suggest a different
primary goal of this Energy Plan, which should be
to propose New Jersey's contribution to reducing the
greenhouse gas emissions which are currently at 390
parts to the million to more like 350 parts to the
million, which is what is needed to reduce or limit
the amount of sea level rise that will take place in
the next hundred to two hundred years.

We are currently sitting at fifty feet
above sea level. When Greenland and Antarctica ice
melt the sea level will be about the top of that
panel (indicating), and all of Cape May will be
under water, Atlantic City will be under water by
the end of this century.

We really I think need to deal with that
and I hope you will.

Thank you.

PRESIDENT SOLOMON: Thank you.
David Most from Lacey Township.

Councilman, how are you?

MR. MOST: Good afternoon.

I would like to first commend the Board for doing a good job on the Energy Master Plan. I think it's time that we have a comprehensive plan.

My name is Dave Most, I am the former Mayor of Lacey Township, I am presently a Committeeman, and I want to thank you today for giving me an opportunity to speak.

It is really nice to see all this input because I think it justifies why people are so proud of living in New Jersey and the diversification that we do need in New Jersey when it comes to fuels because it is so important, the more generation we have out there and the more stable our grid system is, what that offers our residents is lower electric prices.

I am in a unique position because I have worked down at Oyster Creek for thirty years, I'm proud to say. I have seen what it has done for our local community and for the County and what it has done for the State.

As far as jobs, with the young graduates coming out of college it gives good sound jobs. It only makes sense to me because renewable energy, although it is a very important part of the mix, I do not believe there is enough base load electricity, and I know we consume a lot of...
electricity in New Jersey and I think it is paramount, and I'm with the Governor and this Board in that we should be generating electricity in New Jersey because we see our economy falling and it is all about jobs, jobs, jobs.

I want to thank you for implementing Lacey Township in your Energy Master Plan as far as a site for future generation, whether it be combustible, turbine, biomass, gas plasm, whatever, because we are in a region where we need that power and we need jobs, and it will have a devastating effect on our local economy as far as jobs.

When Oyster Creek comes off-line in 2019 we have the capability in that substation of basically delivering eight hundred megawatts of electricity so we have a lot of potential there, and there is five hundred acres on the back site for building plants for the future.

I just want to thank this Board for looking forward toward the future when it comes to building more gas line distribution and lessen our dependency on gasoline, and I think it is really time that the State implement the plan.

With that said, ideally I would love to see the plan when Oyster Creek comes off-line and we have a transfer and we can move the breaker in on another generation station because seven, eight years from now goes by very fast, so I think it is imperative that we be thinking of the future.

I want to thank this Board for being
engaged and commend you on doing a good job on the Energy Master Plan and I would really like to thank you for including Lacey Township.

PRESIDENT SOLOMON: Thank you.

Cathy Sims, Ecological Systems.

Is that a company?

MS. SIMS: Yes.

There is a study that came out recently which is posted on energysavvy.com which indicates that with energy efficiency we can create ninety times the amount of jobs that are in nuclear plants, that they create, with half the amount of money invested.

I think it is long past time to take nuclear out of the basket, and let's do it before it makes New Jersey a basket case.

Thank you.

PRESIDENT SOLOMON: Thank you.

Sky Sims.

MR. SIMS: Six dollars per person per year would yield solar projects over the last ten years.

For the cost of six dollars per year per person we are transitioning to the use of clean energy from coal, fossil fuels and the most dangerous and expensive of all sources, nuclear power plants.
Solar now generates more than one percent of our daytime energy needs. Due to line losses and strain on the grid, the one percent peak energy generation actually represents closer to two percent of our daily energy needs at a saving to ratepayers over the past decade.

If we continue at our current pace New Jersey could be one hundred percent powered by non-pollutant solar energy in the next ten years and will be in a position to export energy to our surrounding states which are drowning in dirty energy just as we are now.

In addition to generation, two percent of our investment of ten dollars per year per ratepayer, we have generated over three thousand jobs, which is more than three times more than currently provided by the existing entities, in addition to more employment to be gained from clean energy generated in other states in the country.

The State of New Jersey by my calculation has been able to reduce far in excess of twenty-seven million dollars to the additional tax revenues, salaries and the capital expenditures created by these companies.

This is in addition to the seventy-six million dollars a year of energy being generated by the solar systems installed in New Jersey so far. These systems have an expected life in excess of forty years, which means that these systems will generate approximately four trillion dollars of
usable energy for the State of New Jersey during
their lifetime.

    if we continue forward in our current
pace we can turn this four trillion dollar revenue
stream into two hundred trillion dollars for the
State of New Jersey and its citizens. Considering
the initial deployment cost of these systems and
that the citizens of New Jersey have shown a great
willingness to cover the thirty percent remaining
cost in conjunction with the State of New Jersey
contributing only about fifteen percent of the
Initial costs, why in the world are we letting this
opportunity go by at a time when we should be
pushing as strong and as hard as possible to
maximize the amount of Federal dollars it would
bring into this State of New Jersey and which would
give the Federal government far more back in tax
revenues than we give back now. So now is our
opportunity to push forward and get back every
dollar we have given them in generation and also
make New Jersey the number 1 energy provider for the
East Coast.

    We have got the ability now to move
forward and do this, we have got the infrastructure
in place, we have got the companies, the growth, we
have shown that we can do it through our solar
enterprises. This requires the greatest level of
commitment from our representatives and the people
who we have chosen to administer these programs.
One in three people are now likely to get cancer in their lives, cancer has become the second leading cause of death in the United States. This number has been around for the last six years. The average cost per person to treat cancer is approximately thirty-five thousand dollars, and that doesn't include their loss of productivity, their ability to go to work, it is just the hard cost of going to the doctor and getting treatment. Cancer costs is just one part of the high costs of the current means of energy.

It is quite clear that solar energy is one of the cheapest means and most efficient ways of providing energy and reduced health costs.

Oyster Creek is the oldest and most dangerous nuclear power plant on the planet. Chernobyl and Fukushima resulted in the worst man-made catastrophe that our species has ever known.

Fukushima resulted in the loss due to radiation of over—the permanent saturation of all land within fifty miles, which is the equivalent in New Jersey of Monmouth, Middlesex, Atlantic, Burlington and Ocean Counties all at the same time.

A study of the map shows that radiation in the Northwestern United States has increased over thirty percent. Oyster Creek has more radioactive fuel cells and lead storage than both Fukushima Chernobyl combined.

The ratepayers have invested billions of
dollars in Oyster Creek, including a five hundred million dollar decommission fund. The solar industry has received far less than that and already produces nearly as much usable energy and tripled the employment level per unit of usable energy at a fraction of the cost.

Let's stop traveling down a dead-end road and invest funds in clean, renewable technology, which nuclear is not.

It is only a matter of time before this State begins to realize how much it has lost in the tremendous unprecedented advantage that I and others have provided through our life's work.

The solar power industry that was created was intended to provide rapid deployment of solar arrest energy, and it has done that.

From its inception the idea of solar carve-out in conjunction with SACP was never meant to be outside of the fiscal system for funds. It has always been understood that the RPS solar carve-out would be continually approved in order to insure that the solar price remains close to the SACP schedule made by the BPU, And that the transition from dirty, more costly energy versus clean non-polluting, non-radioactive energy would happen as fast as possible.

As for non-renewable energy, the root cause of its collapse is a combination of technological underfooting and the lack of
productive capacity.

Solar and other clean sources of energy are a part of that productive capacity which New Jersey and the country are in dire need of.

As a citizen of New Jersey I would prefer the now available cheap, abundant clean energy resources, New Jersey has enough available resources to provide for the energy needs of the tri-state area and beyond. It is imperative that we don't let this opportunity pass us by.

To this end we need to increase the RPS carve-out to at least thirty percent and decommission the nuclear plants as rapidly as possible, they are too expensive and too dangerous and too unreliable.

The explosive growth of the solar industry has shown that New Jersey has absolutely no need to continue the operation of the nuclear plants and New Jersey can easily by 2015 bring down greenhouse gas reduction without the use of any nuclear plant.

Thank you.

PRESIDENT SOLOMON: Two questions.

The first is, you did mention a lot of statistics. Do you have where those statistics come from?

MR. SIMS: Absolutely, I will provide that to you.

PRESIDENT SOLOMON: And the second question is, do you have any idea of how much or if any base load or mid-merit generation, coal,
nuclear, gas, any of that has been displaced by
solar? There is an assumption that four hundred
megawatts means there are four hundred megawatts
that you don't have to buy or produce, I'm just
going to tell you that that is false, but do you
know if it has actually displaced any?

If you have any information or have access
to it, let me know, we would be very interested in
it. I want to know if any solar has displaced any
mid-merit or base load. If you have it, give it to
to me, if you don't have it now get it to me some
other time.

I heard a lot of facts and information, I
am asking for some follow-up in substance if you
have it, and frankly, if anybody has it, we would
like to get it. We have heard a lot of stuff about
a lot of stuff.

MR. SIMS: I'm talking about the ability to
generate energy. We are talking about shutting down
the nuclear plants, absolutely which will reduce --
PRESIDENT SOLOMON: I have a very simple
question, if you have the answer, I'm not asking for
your opinion, I'm just asking for what you can find.
What, if any, mid-merit or base load
generation has been displaced, that is, isn't

running, because of solar? If you don't have it,
try to find it, and if you can find it give it to
MR. SIMS: I can tell you right now that it would be about two percent of the daytime generation--

PRESIDENT SOLOMON: I understand that, I'm just curious. If you can answer my question I'd like to--

MR. SIMS: Sure.

I think in terms of how much peakers

PRESIDENT SOLOMON: We are not talking peakers, that's a different question. That doesn't even relate to what I am asking. Get me the info and the basis for it.

Thank you.

I'm going to take a two minute break but Commissioner Fox is going to continue. I'll be right back.

COMMISSIONER FOX: Deb Dagavarian.

MS. DAGAVARIAN: First let me say that I am hear because I care dearly about this state, this country and this entire planet.

New Jersey, the leader in renewable energy, as you know we are second nationally for solar and wind, and our current goal for generating energy from renewable energy sources tells me that the State cares about things like jobs for its citizens, minimizing pollution and not being dependent on other states for energy.

The last thing that we should be doing is reducing this role.
Both solar and wind power create new jobs than natural gas and nuclear. Solar is perfectly clean. Natural gas production necessitates fracking. And nuclear energy, relying on nuclear reactors for energy is like trusting John Gotti to protect your family from violent crime; sure, he has the guns and guts to handle protection, but do you really want him hanging around your loved ones?

I want to increase, not decrease our goal to generate clean energy from renewable sources, and I think we need to be honest about what clean energy really is, that it does not include nuclear or natural gas.

COMMISSIONER FOX: Jennifer Hansen, Ole Hansen & Sons.

MS. HANSEN: Good afternoon, Commissioners, New Jersey Energy Master Plan Review Committee and all other interests represented here today.

Thank you for the opportunity to speak.

My name is Jennifer Hansen, I am with Ole Hansen and Sons. I am with an eighty-two year old company that has worn many hats over the years. We started as a marine and heavy construction company, transforming under the direction of my father, Roger, into a real estate development company. Most recently we have developed multiple solar projects totalling about 124 megawatts to date.
And just as an aside, I would like to support what Dr. Salmon said about having a floor on the SREC program. We are interested in developing a tidal energy project as one of our operating companies. After having our initial survey done by Natural Currents, we have found that tidal seas are significant in the channel waves and that there is sufficient water depth for tidal turbine installation between spans of the bridge footings. We are also interested in examining the possibility of developing some of the other projects that Natural Currents has identified as productive tidal energy sites. They have been doing studies for the Department of Transportation throughout New Jersey.

In researching this project we talked about the possibility of a pilot project including a number of tidal energy places, realizing that if you have a place in different locations the tides rise and fall at different times so when you look at the overall energy generation it is constant power generation. This is one of the major benefits of tidal, that is, the capacity resource provides quality dependable megawatts, unlike solar or wind. The tides rise and fall all day, all night, three hundred and sixty-five days a year. There are some lulls, but if you look at it on a regional basis those lulls are at all different times, so it's important that we have
places in different locations throughout the State

We would request that the Board consider a
carve-out for tidal energy much like that for off-
shore winds. We are working on some initial
programs for this project and we think that it is a
viable business opportunity that will create many
jobs, and we would like the same consideration that
is given to solar and off-shore winds.

Doing so will put New Jersey even further

ahead with respect to renewable energy throughout
the country.

PRESIDENT SOLOMON: Thank you.

David Forsyth, Gerdau.

MR. FORSYTH: President Solomon,

Commissioners, to present my comments here today.

My name is David Forsyth, I am the
Regional Energy Manager of Gerdau. Here with me is
Mark (inaudible)

Gerdau is delighted that the State of New
Jersey is taking steps to revisit the Energy Master
Plan. Gerdau supports the concept that a secure
energy future must be reliable, safe and affordable.

Gerdau remains very concerned about the
affordability of energy to power its steelmaking
operations in Sayreville. Several aspects of the
State's current energy strategy jeopardize the
ability of large industrial users of electric power
and natural gas to compete effectively in today's
challenging marketplace.
Companies like Gerdau are highly motivated to operate as energy-efficiently as possible due to both global competition and the major role energy costs play in their operations. The State's energy strategy should also support and facilitate these objectives and recognize that energy policy directly impacts a manufacturer's ability to compete, employ and contribute to the economy.

Gerdau operates a steel minimill that could employ three hundred and fifty employees at peak capacity and is currently employing just over two hundred people. It is important to note that Gerdau has shut down steelmaking operations in neighboring Perth Amboy, in part due to the high cost of electricity and natural gas in New Jersey. Unfortunately, that shut-down resulted in hundreds of employees losing well-paying jobs. The continued operations of the Sayreville facility, which still pays high energy costs despite being energy efficient, remain challenged.

By utilizing scrap as the primary source of raw material in the electric air furnace at the Sayreville mill, approximately 60 percent less greenhouse gases are emitted than by traditional basic oxygen furnace steelmaking. Electric air furnace steelmaking also uses considerably less energy than basic oxygen furnace steelmaking. Gerdau has invested heavily in energy efficiency and manufacturing process improvements.
since 2002, spending over forty-four million dollars
to improve energy efficiency at the Sayreville plant
during this period. These initiatives have
resulted in the Sayreville plant being in the top
quartile of the Gerdau North American fleet in terms
of electricity and natural gas usage efficiency.
And the achievement has occurred despite running at
reduced capacity.

The Sayreville plant delivers the benefits
of demand response to the State in general and
customers in the JCPL zone in particular. The
Sayreville facility has curtailed operations during
the peak demand periods for many years now in
efforts to reduce the capacity obligation to the
plant. This has resulted in lower cost to Gerdau,
lower capacity market clearing prices for all New
Jersey customers and enhanced levels of
reliability. Curtailing during these periods also
results directly in lower energy prices to customers
in the JCPL zone during these peak periods.

To further manage the high electricity
costs the plant is also engaged in maximizing off
peak operations, constant monitoring of DA and RT
prices and participation in PJM's synchronized
reserve program.

Yet, in spite all of these initiatives,
the Sayreville plant remains in the top third in the
Gerdau North American fleet in terms of energy cost per unit manufactured.

Gerdau encourages New Jersey to engage proactively and immediately on the five overarching goals that the State has identified to achieve the objectives of the Energy Master Plan, and we provide the following comments on each.

Goal number 1- Drive down the cost of energy for all customers:

Obviously, this is a worthwhile goal. I quote from page 14 of the Draft Energy Master Plan that, "Electric energy costs have a significant effect on the economic well-being of C&I customers. High electricity prices discourage new manufacturing and commercial entry and may cause electricity-intensive industry to relocate. Against the backdrop of the recent recession, businesses hesitate to expand, in part due to high electricity prices."

Gerdau thanks the State for recognizing this as a serious problem and urges the State to take affirmative action to reverse the disproportionately adverse impact of the State's current energy strategy on large consumers' energy costs. As I stated earlier, since 2002 Gerdau has invested more than forty-four million dollars in the Sayreville facility to increase the plant's competitiveness and energy efficiency. Any future expenditure on capital projects at the Sayreville Mill will depend on the individual returns on
investment available from the Sayreville Mill and will certainly be subject to competition among the other twenty mills in the Gerdau Long Steel North American group. The continuing burden of the Societal Benefits Charge, for example, obscure's the Sayreville plant's relative strength in energy efficiency.

Gerdau currently pays over one million dollars each year at the Sayreville facility for the Societal Benefits Charge. These charges are not connected to the underlying costs of energy supply or delivery and impede Gerdau's global competitiveness. Also, these charges are levied on a kilowatt-hour basis which disproportionately impacts high-volume electricity and natural gas users, like Gerdau, to support various State and EDC programs.

New Jersey's SBCs grossly exceed comparable charges in nearby states, contributing to New Jersey's competitive disadvantage among states in the Mid-Atlantic and Northeast and contributing to the flight of industry from New Jersey. Gerdau and other manufacturers understandably react with considerable frustration and apprehension to any suggestions that multiples of present day amounts could be expended to achieve EMP goals. All New Jersey customers have contended that the SBC should not be viewed as a bottomless pit.

Not only are increasing SBC levels
counterproductive to the State’s economic development objectives, but the recovery mechanisms for the SBC are also counter-productive. For example, current recovery of costs through the SBC entirely on a usage or volumetric basis is counterproductive to the EMP goals of peak load reduction. Charging the SBC on all kilowatt hours no matter when they are consumed mutes the signal to shift load to low demand periods.

New Jersey could make large strides in its economic development initiatives by eliminating certain, and substantially other, State-imposed charges for large volume, energy intensive employers in the State. Gerdau suggests that the State consider full exemptions, opt-outs, revised cost allocation, hard caps and SBC phase-out as options for those types of customers. Ideally these initiatives would emanate from the General Assembly, with changes to the existing statutes to mitigate the adverse impact of the State’s policy initiatives on energy-intensive manufacturing customers. The Board should do what it can when it can.

I must emphasize that Gerdau recognizes and does not intend to shirk its corporate citizen responsibilities with respect to the low-income assistance components of the SBC.

Also, New Jersey should routinely benchmark its industrial electricity and natural gas prices against those in all U.S. states. This benchmarking will reveal the relative success or
failure of initiatives to eliminate cross-subsidization.

New Jersey should also solicit from manufacturers within the State, on a confidential basis, any information they have on the comparison of their New Jersey energy costs to energy costs at their other facilities.

Goal number 2 - Promote a diverse portfolio of new, clean in-State generation:

PJM's Reliability Pricing Model has now been in place for more than three years and has tagged New Jersey customers with more than ten billion dollars in capacity-related costs. Notwithstanding this extreme resource commitment, New Jersey customers can credibly argue that their collective investment has not resulted in meaningful amounts of newer or more efficient in-State generation. Like the failed promise of LMP, these new and even higher price signals are not delivering on their promise to incent investment.

The State and the BPU are no longer in a position where they can "wait and see" whether RPM will work. The evidence overwhelmingly demonstrates that PJM has fallen short. Gerdau supported in 2010 and now applauds the efforts that the State is taking to secure new in-State generation facilities. If the State determines that barriers to new entry cannot be overcome or that competitive markets are not present in New Jersey then the BPU should
actively engage in efforts to cease the
"price-signal aspects" of existing market designs.

At the same time the State and the BPU
must be extremely careful not to exacerbate the
adverse impact of kilowatt hours based charges. To

that end, the costs of new generation capacity must
be allocated to and recovered from customers on a
capacity basis, consistent with the drivers of the
cost-incurrence. If such allocation does not occur,
the State's new generation initiatives will actually
inflict a substantial amount of harm on large,
energy-intensive manufacturers, directly contrary to
economic development objectives. The authority to
"get the cost allocation" right resides with the
BPU; its hands are not tied.

Gerdau also supports the EMP's proposal
to keep nuclear on the table as a viable base load
option.

Goal number 3 - Reward energy efficiency
and energy conservation and reduce peak demand:

Gerdau is pleased that the State is
promoting EE, DSM and Peak Demand reduction
initiatives. The smaller customer classes will
largely benefit from these programs. The State
should be congratulated for developing the Large
Energy User Pilot Program that just kicked off.

However, the State's current EE and DSM programs
costs are recovered from all customers on a kilowatt
hour socialized basis without any consideration of
customer class characteristics.
Some large energy-intensive industrial manufacturing processes, like steelmaking, have exhausted available technologies to achieve cost-effective reductions in consumption. These customers should not be subsidizing other's projects or education through State or utility sponsored programs. This results in a consumption tax, not an incentive to improve, and definitely not a reward for early response. Gerdau has in-house energy efficiency programs designed for steelmaking facilities by steelmaking experts. We don't need another program that will only pancake costs.

Goal number 4 - Capitalize on emerging technologies for transportation and power production:

While Gerdau supports the State's initiatives on emerging technologies such as biofuel and Waste to Energy, there is no reference to Waste Heat Recovery in the draft Energy Master Plan. If the State invests in waste heat recovery projects through funding and grants much the same way it does for renewable generation, the result is a win-win. Waste Heat Power generation really is a good idea. Waste heat recovery projects at industrial facilities not only make gains toward the goals of the Energy Master Plan by reducing peak demand and GHGs but they increase the competitiveness and...
sustainability of jobs and manufacturing in the State. Waste Heat Power would be available when industrial facilities are operating, generally do not require distribution or transmission system upgrades and result in lower energy and capacity costs for all New Jersey ratepayers. Gerdau submitted comments on the Energy Master Plan in late 2010 that address this issue.

The State should aggressively target waste heat by directing the Office of Clean Energy to design a program that incents manufacturing facilities to install waste heat power generation.

Goal number 5 - Maintain support for the renewable energy portfolio standard of 22 and-a-half percent of energy from renewable sources by 2021:

The draft Energy Master Plan does include language about the need for solar and wind to be cost effective, which is not a concept that was very important to prior Energy Master Plans. Gerdau applauds this specific objective, but continues to question the cost effectiveness of an RPS goal of 22.5 percent. If such an aggressive goal remains part of the State's energy policy, then the State must focus on ways of eliminating barriers to market-based investment and should seek to minimize or eliminate State subsidies for renewable generation. Also, the talk of five billion dollars off-shore wind projects is enough to warrant a "go-slow approach" until costs and benefits are more fully known.
The State should also reconsider the allocation of customers' obligations to purchase renewable energy credits. Currently all megawatt hours of energy consumed must have a certain percentage of RPS. This includes solar RECs. While most forms of renewable energy can be generated at any time of day, such as when the wind blows, when the water flows and when the landfill decomposes, we know that solar power is only generating during the daylight hours. So the question is, why are consumers obligated to purchase SRECs for energy consumed at night? The State should exempt energy consumed during the nighttime period from solar REC obligation. This would provide an additional incentive for load shifting and, therefore, make sense for many reasons.

To close, Gerdau emphasizes that inclusion of any initiatives or goals in an Energy Master Plan is only the first step in the process. If the Energy Master Plan is to succeed, the State must fully commit its attention and the necessary resources and consider the net impact on the industrial manufacturing base when making decisions.

I also emphasize that many of the suggestions provided in my comments are not new and do not need to await formal adoption and implementation of the Energy Master Plan. Rather, the Governor, the General Assembly and the Board can take affirmative steps now to address many of the
problems I have identified. Gerdau remains willing and able to help move the process along. Thank you.

PRESIDENT SOLOMON: I have a couple of questions. I know you have written comments that discuss this in more detail, but I am not sure that everybody here knows it.

In terms of SBC or similar charges and costs that are based on the kilowatt hour, is it your position that they should not be based open the amount of kilowatts used, but when they are used?

MR. FORSYTH: Yes.

PRESIDENT SOLOMON: So that if you bring your use off of peak load you would be billed or charged differently and, therefore, have an incentive to stay off-peak?

MR. FORSYTH: Yes.

PRESIDENT SOLOMON: Have you ever done I think you said a million a year in SBC?

MR. FORSYTH: Yes.

PRESIDENT SOLOMON: Have you ever done an analysis of what the other costs are such as other programs, other SRECs or any other subsidies?

MR. FORSYTH: Yes, we can do that, if it can be confidential.

PRESIDENT SOLOMON: Once you give it to me it will be public.

Conrad Cantell.

MR. CANTELL: I am Conrad Cantell, and
I want to thank the Commission for the opportunity to speak before you today. I am here today as advocate for clean and renewable energy. Renewable energy, be it solar or wind, can be counted on as a source of power for the State and the country for the claimed goal of energy independence.

(Inaudible) has been powered by an array of thirty solar panels since 2008. These panels provide for 35 to 45 percent of our daily energy needs and resulted in a savings of approximately one hundred thirty five dollars per month as indicated on our yearly budget.

I hope family and friends in their desire to learn more about renewable energy sources become more energy conscious and aware of how their carbon footprint will best be obtained.

Natural gas is not a clean renewable source of energy for the generation of electric power. Additionally, the method of fracking natural gas is both costly and potentially dangerous in that process which results from the run-off of the resultant flurry which is processed through carcinogenic chemicals.

As I am sure you are aware, solar energy as an industry is a job creating machine with over two thousand renewable energy businesses and over twenty five thousand jobs in this State alone.

Return on investment and return on jobs
creation is unprecedented. For every million
dollars spent on fossil fuel energy generation only
five jobs are produced, whereas the same million
dollars produces seventeen jobs in the renewable
energy sector.

How can a State want to move backward to
22.5 percent of renewable generation from the 2008
goal of 30 percent? The future calls for the
expansion of renewable energy, not reduction.
As wind and solar clean generation becomes
available, the cost of both equipment and
installation will continue to decline based on
economies of scale.
Now is the time to move forward, to be on
the vanguard of renewable energy as a source of
energy efficiency. New Jersey has been and should
remain a leader in the country and as a creator of
renewable energy.

Thank you.

PRESIDENT SOLOMON: Thank you.
Richard Kunze, representing The
Environmental Authorities Association of New
Jersey.

MR. KUNZE: Thank you, President Solomon
and Board members.
My name is Richard Kunze and I am
representing The Association of Environmental
Authorities Association of New Jersey, AEA for
short.

We represent one hundred local and
regional public agencies that provide water, waste water treatment and solid waste management services to communities across the State of New Jersey.

The members of the AEA support the goals of the draft Energy Master Plan.

As agencies already providing vital services to the public and that use 3 to 4 percent of the State's energy, it is important that authorities and municipalities focus efforts on energy efficiency and energy conservation.

Doing it returns a double benefit to the public, freeing energy supplies for other purposes and holding water and wastewater rates as low as possible.

It was for these reasons that AEA member agencies actively sought the available grants and loans and use these funds to make existing processes more efficient.

Authorities have installed methane gas, electric systems, solar panels and windows. They have invested in energy audits that reveal avenues for conservation and they continue with a list of projects that address elements of energy audits in capital plans.

Some of these same agencies are now exploring using (inaudible) with methane energy.
systems to process food waste, fats oils and
greases which benefit the whole community by
increasing the amount of clean renewable energy
produced.

These facilities can provide a resource
recovery process for food waste and significantly
reduce the overall greenhouse gas output by the
community served.

The association has held numerous
conferences to educate and advise members on energy
savings opportunities and alternatives that are
available as well as funding sources available to
achieve them.

Each year for the past five years the AEA
awarded special energy saver awards to those members
who take actions to improve their energy efficiency.

In this manner the Association and its
members have been implementing the first goal of the
State Energy Master Plan, which is to drive down the
cost of energy for all customers.

We also supported the second goal of
promoting a diverse portfolio of new clean in-state
generation. Numerous authorities have added solar
panels to their facilities, including, but not
limited to, Atlantic County Utilities Authority,
Ocean County Utilities Authority, Landis Sewage
Authority, Northwest Bergen Authority and Mt.
Laurel Township.

Atlantic County and Landis have installed
windmills and Bayshore Regional Sewage Authority has
a permit to construct a windmill on its property.

Other facilities such as Ocean County and Bergen County and Joint Meeting of Essex and Union have invested significantly in an anaerobic system to create clean energy out of waste sludge.

Other authorities have utilized similar systems to run boilers and other energy recovery systems, offsetting electricity or natural gas traditionally purchased on the commercial market.

We believe that the wastewater authorities of New Jersey have a very promising future serving the State in energy generation and resource recovery on top of the vital role that they already serve in treating and recovering water resources.

Reducing peak demand is already part of the utilities' best management practices. Since facilities must have emergency generators and must exercise those generators to insure their reliability, it is also helpful to enter into demand response programs that reward the utilities' ability to reduce load on the PJM grid at peak time; such management produces a win-win situation across the board.

In these ways New Jersey environmental authorities have been and will continue to support renewable energy production in order to meet the State's goal of twenty-two and-a-half percent of energy from renewable sources by 2021.

Thank you for the opportunity to comment.
on the plan and count on The New Jersey Environmental Authorities Association to do their part in the successful achievement of the State's goals.

Thank you very much.

PRESIDENT SOLOMON: Thank you.

MR. KUNZE: I would like to also recognize our Co-Chair of our Energy Committee, (inaudible) of the Atlantic County Utilities Authority, it is a special day for her, it's her birthday.

PRESIDENT SOLOMON: Happy birthday.

Michael Van Brunt.

MR. VAN BRUNT: Thank you very much for the opportunity to comment on the draft 2011 New Jersey Master Plan.

Covanta Energy is a leading international owner, operator and developer of energy-from-waste facilities. We also operate other renewable energy facilities including landfill gas to energy and biomass to energy facilities. Energy-from-waste is a proven technology that converts municipal solid waste into baseload steam and/or electricity. There are currently eighty-six such facilities operating in the United States, including five in New Jersey.

Covanta Energy, headquartered in Morristown, New Jersey, has three New Jersey facilities in Essex, Union and Warren Counties which together generate over 120 megawatts of power.

We fully support the draft Energy Plan's recognition of MSW as a large untapped resource in...
the State. As noted in the draft Energy Plan, only
17 percent of the State's MSW is converted into
energy. Even providing for a State-wide MSW
recycling rate of 50 percent, new energy facilities
could generate 1.3 million megawatt hours of net
electrical energy from existing State resources.

As an economic driver, the construction of
one 50 megawatt energy-from-waste facility can
create nearly one billion dollars worth of economic
activity and create approximately eight hundred
direct and secondary jobs a year during the three
year construction period. There are approximately
fifty permanent high-paying jobs necessary to
operate the facility.

We also share the draft Plan's perspective
that the current disparity between landfill gas to
energy, a Tier 1 resource, and technologies that
generate electricity prior to landfilling, currently
in Tier 2, must be corrected. Based on national
averages, each ton of waste processed at an
energy-from-waste facility leads to the reduction
of a ton of carbon dioxide equivalent greenhouse gas
emissions relative to landfilling. This is
predominantly due to the prevention of landfill
methane, a GHG twenty-five times as potent as carbon
dioxide.

Concurrently, energy-from-waste recovers
ferrous and non-ferrous metals for recycling, and
supplies baseload renewable energy to the grid,
avoiding fossil fuel combustion. Energy-from-waste generates an order of magnitude more electricity than landfill gas to energy per ton of post-recycled waste, on a much smaller land footprint. To encourage better use of the State's waste resources, we support the inclusion of energy-from-waste as a Tier 1 renewable and the continued inclusion of LFGTE as a renewable energy source only for existing landfill cells, so as to not encourage more landfilling.

New Jersey will be in good company in recognizing the energy potential and GHG benefits of post-recycled MSW. The State of Maryland recently passed legislation that recognizes energy-from-waste as a Tier 1 renewable energy source. Energy-from-waste is defined as renewable in twenty-six states, including New Jersey, and by the Federal government. The European Union through expanded recycling and energy recovery, driven predominantly by the passage of the landfill directives limiting use of landfills, has achieved reductions in waste sector GHQ emissions by 34 percent, the highest of any sector.

Energy-from-waste facilities in developing countries have been approved to generate carbon offset credits under the Kyoto Protocol. Closer to home, the Lee County energy-from-waste facility in Florida had been generating and selling carbon offset credits for two years. The World Economic Forum in its 2009 Davos Report identified...
energy-from-waste as one of eight technologies likely to make a significant contribution for a future low carbon global energy system.

Energy-from-waste can help New Jersey produce baseload renewable energy near the sources of consumption, create new high-paying jobs, all while reducing the price to the consumer, reducing greenhouse gas emissions from waste management and conserving land.

We look forward to working together in our home state to better use our available resources for more sustainable solid waste management and energy policy.

Thank you again for your time and the opportunity to comment.

PRESIDENT SOLOMON: Thank you.

Paul Kydd

MR. KYDD: I am Paul Kydd, K-Y-D-D. I am President of a company called Partnerships1, Inc.

President Solomon and distinguished Board members, I am very grateful for the opportunity to comment on the draft Energy Master Plan.

Partnerships1 has developed the technology to convert pickup trucks to plug-in electric hybrids which will cut the fuel consumption in half, and that is significant savings for a lot of big
In that context I am grateful to hear that the Master Plan has a section on transportation and vehicles, and I am even happier to see that at page 125 the first paragraph mentions electrical vehicles as electric storage vehicles, and I would like to expand on that paragraph.

The number of electric vehicles anticipated for New Jersey by the Center for Automotive Research is twenty-one hundred in 2012, rising to about thirteen thousand one hundred by 2015, and that's a significant storage opportunity.

The batteries in those vehicles, thirteen thousand vehicles, will store something in the order of 260 megawatt hours of electric energy, and that could be made available to the grid at the rate of 260 megawatts or even more, if needed, and they can take excess capacity off the grid at the same rate.

So the point is, even a small percentage of vehicles offers a big impact on the electrical grid system to offer capacity, storage capacity for frequency regulation, demand management.

The value of this capability is significant. The frequency regulation alone at the price that PJM is paying for frequency regulation capacity averaged -- is worth about four thousand dollars to six thousand dollars per vehicle per year, and if a significant piece of that can be made available to the vehicle owner, that's a very powerful incentive for the adoption of electric vehicles.
vehicles.

So my suggestion to the Board is that they adopt a Master Plan goal to realize the value that can be given by this in time for an increase in electrical vehicles that are available to use it in the 2012-2013 time-frame.

This will require both technological and particularly regulatory innovation. The technology is available now in a rudimentary form. The University of Delaware has been pursuing this technology for decades and they have a small group of cars that actually are providing frequency regulation through PJM, so the technology works. Getting it dispersed more widely, and particularly dealing with the financial aspect of it, we get paid our money so that works out, but the technology exists, it is licensable from U. Delaware and there is a comparable program out of UCLA.

The problem is that the market for this already exists, PJM is willing to pay qualified generators for their services, it doesn't matter where they come from and how they generate it, they are willing to pay for it.

So unlike many new technologies and new products, you don't have to create a market for it, that market already exists, that market is there; all you have to do is flange up with it so that you can follow it, and that's what the development requirement is.
There should be a synergy with New Jersey's advanced position with solar energy. New Jersey already has net metering, which you need for this, so that is no problem.

The solar system can provide the grid line inverters, which is a critical part of the system, and an expensive one, the battery is provided by the vehicle, so the combination is technically relatively straight-forward, but you still have a lot of permitting issues of how you actually do this in the homes and it is a similar effort I would assume to getting solar and the qualifications being implemented in the Building Codes.

Finally, I would like to make the point that this opportunity is real. The incentives to vehicle ownership are there, all you have to do is realize the latent value that the vehicle battery represents and make this connection, and the incentives then are provided by the value that you create from them.

So it is an opportunity to create a very powerful program to take New Jersey into the 21st century in which the utility system will begin to displace the petroleum industry as a source of energy for personal transportation and to keep it on a plane with California as the technology leader in the forefront of developing the new century.

Thank you very much.

COMMISSIONER FOX: Can I ask one question? What exactly is the incentive that you are
suggestion?

MR. KYDD: The incentive is making money available for frequency regulation services.

COMMISSIONER FOX: Frequency regulation, okay, that's it.

PRESIDENT SOLOMON: Thank you.

Roger Basin.

MR. BASIN: President Solomon, members of the New Jersey Energy Master Plan Review Committee.

and the present public at large, thank you for the opportunity to participate here.

My name is Roger Basin and I am the President and founder of Natural Currents Energy Services, LLC., a leader in tidal energy technology and a tidal energy site developer, active in the United States and the United Kingdom.

We have served as technical advisors to the UN Partnership for Small Islands in Developing States and represented tidal interests at the UN Conference on Climate Change in 2009 in Copenhagen.

Since 2007 we have identified ten potential tidal energy projects in New Jersey. With the support of the New Jersey Department of Transportation and Marina in Point Pleasant we are developing the first tidal energy project in New Jersey.

We are also engaged with the New Jersey DOT to survey the State to identify the top twenty tidal energy sites throughout the New Jersey
In the past few years also the international community has requested results of this study of the New Jersey tidal energy efforts in conferences in London, San Paulo, Brazil, Moscow, Washington, D.C. among others.

The company has the U.S. Department of Energy's support for hybrid tidal wind and solar project in (inaudible) New York in cooperation with the New York City Department of Parks and Recreation.

We serve as the technical advisors as to tidal energy to the Prince of Wales in the UK, the future King of England, for his extensive river holdings in Cornwall.

In short, Natural Currents is recognized as a global leader in the emerging field of tidal energy development.

The stated purpose of the New Jersey draft Energy Master Plan is to present a strategic vision for use management and development of energy in New Jersey.

The definition in the Master Plan identifies ways to save money and stimulate the economy, create jobs and protect the environment through a wide range of choices in the policies of the BPU and others.

We contend that a strategic vision for the energy future of New Jersey would be incomplete without specific goals to develop the significant
tidal energy sources that will bring immeasurable contributions to economic clean energy in this State.

Although New Jersey is relatively a small State, ranking 46th in the United States in land mass, its tidal shoreline comprises 1,792 miles, 2,880 kilometers of potential near-shore tidal energy development.

New Jersey contains swiftly moving tidal estuaries, rivers and shoreline inlets that are well-suited for tidal energy power production.

The New Jersey DOT has projected a minimum of 500 and perhaps as much as 1,000 megawatts of tidal energy potential from these resources.

The population of New Jersey, first in the nation with 1,195 people per square mile, presents a population with bold leadership in bringing it toward a greener energy future enabling job growth and economic stimulus.

The BPU should support this leadership position in New Jersey's tidal energy development through specific recommended actions that foster benefits to almost every part of the New Jersey shoreline.

In addition to the Manasquan River-Point Pleasant project, Natural Currents' permanent
locations in the State include the Margate Bridge in Margate City, the Shrewsbury River in Highlands and Sandy Hook, Avalon and the intercoastal waterway, Cape May, and five locations in Cumberland and Salem Counties, a 5 megawatt tidal energy project is underway in Salem and Cumberland Counties, and another 5 megawatts will be developed in Atlantic and Cape May Counties.

With focused and coordinated support to enable streamlined permitting from State agencies, PJM and Atlantic City Electric, these projects can begin commercial power production in the next eighteen to twenty-four months.

Recommendations: Number 1, the Energy Master Plan should include BPU support for ten megawatt regionally distributed tidal energy projects in cooperation with Atlantic City Electric to enable baseload renewable electricity using strategically located tidal energy sites already identified by Natural Currents.

The time delay of the tidal flux along the New Jersey coast can provide baseload green power. Our preliminary estimate provides a constant twenty-four hour generation of 8.1 megawatts from 10 megawatts of installed and regionally distributed tidal energy capacity.

Unlike other renewables that are intermittent, that have intermittency problems in connection with solar peaks when the sun is out, by strategically locating these you can get a flat and
desirable constant twenty-four hour green power from tidal energy.

2: We recommend that the BPU provide guidance and support to facilitate a T-wave, tidal wave process along the lines of the O-lake (phonetic) process, for an appropriate incentive program to support tidal energy industry development in New Jersey. We have already met with the Office of Clean Energy to initiate this New Jersey tidal energy stakeholder process.

3: The BPU should fulfill its advocacy function with the Federal Energy Regulatory Commission, FERC, by enabling an inter-disciplinary working group to facilitate and streamline the cumbersome regulatory and permitting process to foster tidal industry development.

Natural Currents accepts a heavy burden of environmental analysis, we accept fully one year of baseline environmental monitoring and five years of system performance monitoring of fourteen different environmental impacts of tidal energy.

The nuclear industry and the petroleum industry appear to get a free ride by comparison in spite of their environmental records, those impacts are summed up in a few key words, BP, Lybia, Chernobyl, Tsunami, Fukushima.

The emerging tidal energy industry is overburdened by the inefficient tangle of regulatory limitations that are arbitrary, unfair,
expensive, and in may cases totally unreasonable.

The Electric Power Research Institute, a respected and independent research organization, has conducted and presented sixty-eight reports on ocean renewable energy published on the internet and concluded that tidal energy is the most environmentally benign form for electric power generation.

By way of summary, 1, facilitate a 10 megawatt regional tidal project; 2, Establishing direct incentives for this program. 3, Advocacy for regulatory streamlining and coordination.

Those steps will provide for significant regional development, job growth, economic stimulus in contracting and engineering and environmental consulting, manufacturing, assembly, exports, as well as economic benefits for the general population in the hard-hit coastal areas.

Economic stagnation is transformed through vision, leadership and bold action. Not only in word but in deed, commitment and focus on specific pathways provide a road-map for success and benefits throughout the State.

Written comments will be presented prior to the deadline.

PRESIDENT SOLOMON: One quick question. What, if any, transmission and distribution is available for tidal generation, is
that something that would have to precede it and be
developed, or is there something existing that it
could tie into?

MR. BASON: The smaller units could be net
metered to shoreline properties just like solar. We
have had a meeting, and Commissioner Assalta was
there with Atlantic City Electric, and we understand
there are three hundred feeder lines within Atlantic
City Electric with a 3 megawatt limit.

However, in order to--this is what we
were talking about before, regulatory, I got on the
phone with an (inaudible), "Have you got a map of
three hundred feet?

"Yes.

"We would like to look at them because
we've identified where the tidal waves are and we
want to make a connection."

Well, twenty five years ago you could have
come into our office and you could have looked at
it, but now because of 9/11 we can't do that, so
you have to--it's there and our system was
designed for 2.5 megawatts.

PRESIDENT SOLOMON: We could tell you
where they are but we would have to kill you.

But what Atlantic City Electric's
contention is that there is sufficient distribution
available for the kind of megawatts that you are
talking about without additional investment or
development, all you need is the connection?
MR. BASON: And the studies that may ensue, but they like it.

COMMISSIONER FOX: May I ask a question?

PRESIDENT SOLOMONT: Sure, Commissioner Fox.

COMMISSIONER FOX: Could you not give Atlantic City Electric where the sites are so they could tell you whether it is successful or not?

MR. BASON: I hope so. One of our colleagues from Margate is organizing a meeting with them, we would like to avoid a two and-a-half year wait, permitting these locations is a great expense and then we finally came up on the queue, and you know what, that won't really work, so we would like to coordinate this and we would be very grateful and we would follow any suggestion.

Thank you.

PRESIDENT SOLOMONT: Thank you.

Jeff Benner.

MR. BENNER: Thank you, Mr. President and fellow Commissions, I'm Jeff Benner, private citizen here to speak in opposition to the reduction of the goal to twenty two and-a-half percent from thirty percent.

We are moving so strongly toward that goal but it seems to be going backwards to drop down to the lowest legal limit allowed at this point.

That goal is strongly being reached due to the solar installations that have happened to date, over five hundred, or closing in on five hundred
megawatts by the end of this year, forty megawatts
alone in the month of June.

PRESIDENT SOLOMON: Are you talking about
solar?

MR. BENNER: Solar..

PRESIDENT SOLOMON: That RPS has never
been changed, that hasn't been from the '08 Master
Plan, the statute or anything, that level remains
the same.

MR. BENNER: I'm talking about solar's
contribution towards the overall goal of thirty
percent..

PRESIDENT SOLOMON: That hasn't changed.

MR. BENNER: Also I would like, regarding
Senate bill 2371 that was passed in an attempt to
secure the SREC market from its current collapse,
that has been passed by the Senate but it is right
now before the Assembly, hopefully some leadership
from you guys supporting that as well will get that
out of committee.

There has also been mention of multiple
tiers for SRECs, potentially looking at large scale
industrial projects over a hundred megawatts
separated from smaller commercial projects and
residential.

The drop in SRECs does not, as some people
say, just look forward toward the production of the
best systems in the future, it also hurts people who installed the systems in the past.

With a floor being put on the SRECs, that would insure that these people who have already taken the step forward to help New Jersey and the country towards green energy are not hurt.

Your job is not to solely focus on jobs, jobs, jobs, but also should take into account health, health, health, the health of New Jersey residents, the health of New Jersey's environment and the health of our country.

PRESIDENT SOLOMON: Thank you.

Jesse Connor.

MR. CONNOR: Good afternoon.

My name is Jesse Connor. I speak as a resident of the State of New Jersey where I have lived for forty years.

Thank you for giving me this opportunity to address you.

I am speaking as an American and a member of the global community which will be affected by how our State addresses its energy needs.

As a citizen in each one of those communities I feel that I have a moral obligation to urge you to support a more ambitious Energy Master Plan than the draft that you have presented to us.

The draft is in my judgment a step backward to a short-sighted outdated view of energy.

In our situation in New Jersey what we need in 2011 is a plan that is a step forward and
plan for the future, a future for which we are not
prepared because of the global planet change, faced
with a threat so potentially devastating for our
small coastal State as well as the world at large so
we look to our leaders for help.

We need the Board of Public Utilities to
address climate change and endorsing a plan that has
the most impact to slow the cascading and
potentially catastrophic effect of climate change by
reducing fossil fuel consumption.

At a time when we should be challenging
ourselves to increase the goals of energy
conservation, the 2011 draft Energy Master Plan
steps backward to a plan that is weaker,
shortsighted and less worthy than the 2008 plan.

The 2008 Energy Master Plan goal to make
thirty percent of New Jersey's energy from
renewables was ambitious but doable.

The 2011 plan, by contract, calls for the
least possible goal allowed by the State of New
Jersey, 22.5 percent, in other words, this goal
will support the least we can do on that front.

Now is the time to incentivise clean,
renewable energy so that we don't need to have an
energy portfolio that relies on nuclear plants.
Nuclear energy looks especially bad when compared to
clean energy technology. Nuclear energy with its
astronomical cost is potentially a terrorism target,
a health and a safety issue, its waste management
problem and small workforce is simply not a good choice for New Jersey.

Just as bad and maybe even worse is the support given to natural gas produced from fracking. That practice, currently on hold in the State of New York, relies on undisclosed chemicals polluting air and water, causes municipalities inherent hardships and increased problems, posing a danger to the public health.

All of those problems, and more, have led our State Legislature to move to ban fracking in New Jersey.

That leads us to another moral dilemma: Is it ethical to support a technology in Pennsylvania that we would not permit in our own state?

Now is the time to fully support the twenty percent demand reduction goal set up in the 2008 Master Plan. As you know, energy efficiency has the greatest return for the smallest investment. Achieving this goal will result in huge consumer and commercial savings.

Now is the time to support the Societal Benefits Charge, not to retreat from it. That small amount I pay each month is a dollar and seventy-five cents.

All New Jersey residents are reducing our dependency on fossil fuels.

Now, in 2011 we should be stepping up to the plate, we should be knocking it out of the park.
Instead this report sends our State scurrying into the dugout with our heads down, looking for a pinch-hitter, somewhere. I thank you for listening to me.

PRESIDENT SOLOMON: Thank you.

Christine Guhl.

MS GUHL: My name is Christine Guhl and I am speaking on behalf of the Sierra Club.

As a Sierra Club organizer, I have lived in New Jersey my entire life and I have been very proud of the accomplishments New Jersey has made in clean energy, but I am not proud now. This is a real setback in 2011, this is moving New Jersey backwards. reducing the renewable energy goals from 30 percent to 22.5 percent is another step backward.

I am not going to repeat the many things that you heard over and over again about reducing the goals, about energy efficiency and how important it is, about clean energy and how important it is. I believe you already know all these things.

You already know that New Jersey is one of the leaders in the nation in solar installation. I know, I have heard, I have been at the last few hearings, I am aware that you want facts and you want figures, and so I will give you a few, but not all the figures because that would take up too much time, so I am going to give you a few now.

Jobs are incredibly important not just
during a recession, they are always important. Right now unemployment is in a bad stage and the recession has hit New Jersey especially hard, and we know that clean energy has really survived throughout the recession, but let me give you some numbers about clean energy. Energy efficiency gives us the biggest bang for the buck, it creates between 1.5 and 5 times the number of jobs of natural gas, and I have all of the references, natural gas creates 1.5 jobs per megawatt while energy efficiency creates somewhere between .2 and .6 jobs per megawatt. Wind creates 1.5 as many jobs as natural gas. Solar PV, there are representatives of solar companies here, they have been at the last few hearings, we have seen the faces of people who have been employed by the solar industry who were not employed before, who were not employed before, who were not employed during the recession. There are studies that show that solar PV creates thirteen times as many jobs as natural gas. Solar, wind and energy efficiency all create more jobs than nuclear, which creates about .14 per megawatt. For energy efficiency, that creates 3.3 times as many jobs as natural gas, 3.1 per million for natural gas as opposed to about seventeen jobs per million for energy efficiency, and those are jobs in various fields. I met with someone who because of the State's role in energy efficiency has gained more
work because new glass that is more energy efficient
is being used more often in New Jersey, and that's
because New Jersey has set strong goals for
reducing demand and for energy efficiency.

I have a lot more numbers for you but I
don't want to take up a lot of time today, there has
been a lot of testimony so I am going to keep mine
short because we have a lot of comments that we
will be submitting.

I want to say one thing, I was at the
first hearing and the second hearing, and there were
residents like myself, private citizens that aren't
paid by some industry and don't own a solar company
that are here because they care about the Energy
Master Plan.

It is not about industry, it is about the
people of New Jersey. Thirty-five percent of New
Jersey's electric needs comes from residential
electric needs, that thirty-five percent should be
listened to just like the other sixty-five percent.
So please take into account every comment that every
person from the State of New Jersey that has taken
time out to come to this hearing, taken days off
from work, please take everyone's comments seriously
and weigh every comment that comes from the average

resident to someone who owns a huge company or
utility, please take every comment into
consideration because this plan affects everyone in
new Jersey.

PRESIDENT SOLOMON: Thank you.
Donald Powell, Powell Energy and Solar,
LLC.

MR. POWELL: Good afternoon, President
Solomon, Commissioners and members, I thank you for
the opportunity to speak to you today.
I guess I would like to start off with
congratulations, you have probably heard a lot of
criticism, but you have created a very, very
successful solar energy program. I am President and
owner of a solar energy and energy efficiency
company, we are a State certified energy company so
we are heavily involved in programs that you
created.

Unfortunately, I think that you have been
a victim of your own success.

It is quite obvious that we made a much
too attractive solar industry in the State of New
Jersey. We have brought people in who, I guess it's
probably a bit of a perfect storm, given the
economic climate there is no other place where

people can reap the kind of return that solar has
brought, so the State is being flooded with outside
interest and outside money to bring in the kind of
returns that are not available through Wall Street
and other financial institutions.

I would like to kind of give you a sense
of grounding here, you probably know all this, but
in the recent past the stock market, the Dow Jones industrial average has gone down five, six percent, which has been on the front page of every newspaper in the past few weeks and has got the entire world's financial system in turmoil.

By comparison, the SREC market has gone down over 72 percent over the last few months. This has some outstanding consequences to the people who were early adopters and bought into their vision and invested their money and put it into the market.

Everyone knows, and I have been selling solar for three years and I tell it to everyone that I sold it to, that the SREC market is only a market and it can fluctuate, and they certainly understand that.

But I don't think they ever anticipated in their wildest dreams that the market would go down 70 percent.

A GENTLEMAN: 79.

PRESIDENT SOLOMON: Do me a favor, when someone is speaking, please don't interrupt them.

MR. POWELL: Unfortunately, these folks are being thrown under the bus. A lot of them, probably most of them, have borrowed money to install the systems that support your vision and support the clean Energy Master Plan and clean energy in the State of New Jersey, they have payments to make and the cash flow is just not there.
I spoke to one of your people from the Clean Energy program yesterday at a lunch, and when I asked about the Master Plan and the SREC market, his advice was, well, bank them because we don't think that the SREC market is going to stay low.

Unfortunately, that's not an option, they need cash flow, they don't have a of money to sit on and wait. They need to make payments and certainly in this economic climate, that's a challenge to a lot of people.

Second of all, from a grass roots kind of a level, I have had two people cancel contracts in this past week due to the instability in the SREC market. They looked at it, they have seen what happened to it and they don't want any part of that.

Going forward, if that's the case what that is going to translate into is that there are going to be people out of work, there will be families in distress and it will mean reduced taxes to the State because people are not working.

I would like to recommend to you two things: Number 1, to do everything you can to raise the RPS standard right now to pick up the slack and get rid of the excess.

Number 2, to find a way to limit the amount of solar that is approved so that it does not exceed the RPS, perhaps that needs to be limiting large scale solar installations, but the people of New Jersey who are residents, who are businessmen,
who are doing what they need to do and what they can
do, they need to be protected, their interests need
to be protected by the Board of Public Utilities so
that they don't get shortchanged on the SREC
market.

            Thank you.

            PRESIDENT SOLOMON: Thank you.

            Susan Polk.

            MS. POLK: Good afternoon.

            I am Susan Polk, and I have lived in New
            Jersey all my life.

            I have come here today as a concerned
            mother, grandmother, daughter, sister and one
            dedicated to living her best life.

            After thirty-three years of teaching in
            New Jersey's public schools I now serve as an
            elected official on the Mullica Township Committee,
            I created and serve as President of the Sustainable
            Mullica Green Team.

            Taking responsibility for our actions is
            necessary for our survival and our good quality of
            life. The clear and responsible choice here is to
            make clean that renewable energy is a priority in
            our State. If you look at the clean energy picture
            realistically, solar and clean energy clearly come
            out ahead as a better choice.

            I oppose all new coal plants, the New
            Jersey Energy Master Plan should set a timeline to
            phase out all of New Jersey coal plants, and no new
transmission lines that would import coal energy to New Jersey should be constructed.

Please, the 2008 Energy Plan goal to generate 30 percent of New Jersey's energy with renewable sources should remain intact to continue so we can have clean energy and economic growth and the 22.5 percent reduction in that plan should not be implemented.

Let's keep New Jersey as a leader in sustainable environmentally healthy practices.

PRESIDENT SOLOMON: Thank you.

Douglas Dickinson.

MR. DICKINSON: Thank you, President Solomon, and the rest of the members of the Commission.

I am really going to be short because what I was going to talk about basically Jesse Connors and Christine Ghul spoke about what I was going to say.

I would like to make a comment on something that Senator Whelan mentioned. He talked about getting those boat builders back to work. I have been a boat builder for twenty five years. In the early nineteen-nineties, we know the economic conditions, and I was a victim of what was going on and I lost my job.

I am working with Senator Whelan, I am a Councilman in Egg Harbor City and I have been working to get fiberglass workers back to work, we can do it all, we can make the parts, we shouldn't
be outsourcing any jobs to any other state.

We read in the papers about Cumberland County about some of the heavy wind farms on some of the farmers' properties. and you know that the windmills are going to be taking off all up and down the East Coast as years go by, so let's get these jobs to New Jersey and let's get them here now.

PRESIDENT SOLOMON: Thank you.

Xavier Walter.

MR. WALTER: I am Xavier Walter.

President Solomon, thank you so much for listening to us, we appreciate that you have come a long way.

I am Xavier Walter of The Energy Team, new energy contractors currently conducting energy audits in weatherization and energy efficiency upgrades throughout New Jersey.

The last two years have been an exceptional time for the green jobs market. Entrepreneurs like myself have established a foothold on a sustainable business path toward financial recovery. Our team has weatherized over three thousand homes and conducted over five thousand energy assessments and grown substantially due in part to the BPU's clean energy policy.

We work with and support programs like Solar Read, Direct Install, Smart Smart and more.
We need these programs to continue to fund awareness in the marketplace through advertising and promotion. More importantly, we must maintain strict cost control with solid education and training.

The value in these programs lies not in large handouts but the facilitation of growth for a new industry.

New Jersey is the nation's leader in energy efficiency and renewable programs and we would like it to stay that way.

I was able to build a good business and put many people to work over the last few years and we are prepared to keep that momentum going.

We need to build a climate to encourage consumers to be more sustainable, increasing the renewable portfolio standard and supporting the Regional Greenhouse Gas Initiative.

And we look forward to economic recovery. We can rebuild our financial economy through energy savings measures and renewable energy to save up to thirty percent of the consumers' gas and electric bills, that gives homeowners and businesses more money to spend in the marketplace.

Those funds from these projects go into the pockets of employees, supply houses and domestically manufactured products, not to mention all the lunches in local diners throughout New Jersey where we meet to collaborate on best practices and improved operations and networking.
With the decline of the GDP, clean energy program's focus on reduced carbon emissions and lower utility bills are the answer. These programs work in conjunction with the Department of Environmental Protection, local utilities, community action programs, the BPU and many public and private entities so that we can make a major change in our State's economy.

New Jersey needs to continue to be a leader across the nation and around the world for being one of the first to financially recover in these difficult times.

We have over 2.8 million buildings in our State that need to cut their bills by a quarter or more. Energy efficiency is the catalyst that lawmakers need to put our country back on its feet. Recovery starts with a solid plan of action geared toward sustainability, job creation and environmental stewardship. Our current plan puts money in the pockets of carpenters, laborers, electricians, heating professionals, plumbers, scientists, bankers and engineers.

The industrial revolution got us out of the Great Depression and the green revolution can get us out of this recession.

PRESIDENT SOLOMON: Thank you.

George Dzurina.

MR. DZURINA: I am George Dzurina, I have a solar, energy solutions and construction company,
I have done construction for four different County Colleges around New Jersey.

I'm not going to stand here and commend you guys for the plan because when I first read this plan a few months ago I was stunned. I am like one of many, like some of the last witnesses, with my background of being an electrical engineer and automation I decided to move into renewable energy, so pretty much one hundred percent of what I do revolves around energy in some aspect.

I can say that the more I focus in at the lack of press coverage that I have seen in the newspapers, this definitely is not something that I see as a favorable condition here.

So what I would like to say, in one of my positions at Middlesex County College I talk to a lot of people who have been unemployed for six months or a year and who are on a Work Incentive grant, in talking to them, those are people who have been out of work for a year, and one of the things they ask me is, is this really a good place to get a job, and generally I can say, yes, I feel it is.

I wonder if any of you geniuses up there can tell me, is there an industry that has been growing twenty-five percent per year in the last three years of the recession?

We have an Energy Master Plan that's been working very well, it's put a lot of people to work, small business, like myself, and now we are in a spot where I am looking at this and saying,
"I've got to do something different now that I have spent a lot of time, money and effort in the last three years to get to this position and really in the last three or four months it fell apart."

PRESIDENT SOLOMON: Can I ask you a question: What kind of work do you do, solar?

MR. DZURINA: I am an instructor at four County Colleges and a certified PV installer.

PRESIDENT SOLOMON: Secondly, if you want to speak, at least since we have tried to be respectful you can be respectful. If you want to insult the Commissioners --

MR. DZURINA: I am not insulting anyone.

PRESIDENT SOLOMON: Let me finish.

You made a comment that I thought was completely insulting to all of us. If you want to do that again you can wait outside, we can talk off the record another time. If you have something to say on the solar side, go ahead and say it.

MR. DZURINA: You guys are up there in politically appointed positions, so great.

Yes, I am upset about this. I can see my livelihood going down the drain, every project that I go to right now there is indecision. The projects I have done, the pay-back is no longer four to five years, with the SRECs, it happened basically overnight.

What do I see has happened: An Energy Master Plan that has changed dramatically.
PRESIDENT SOLOMON: Why do you think it happened overnight?

MR. DZURINA: Because know where this program is going.

PRESIDENT SOLOMON: Have you considered speaking to any people in the SREC market to find out why it happened?

MR. DZURINA: Yes. I am also a member of the Department of Energy and two weeks ago I was at Penn State, and while I was there, we have members from West Virginia, Delaware, New York, Pennsylvania, and everybody there said, we wish we had an Energy Master Plan like New Jersey.

PRESIDENT SOLOMON: Why did they tell you that the bottom dropped out of the market?

MR. DZURINA: Go look at a brokerage.

PRESIDENT SOLOMON: I'm asking you.

MR. DZURINA: My inclination is because there is a change in the Master Plan.

PRESIDENT SOLOMON: I know why.

MR. DZURINA: You tell me, you know.

PRESIDENT SOLOMON: I'm going to tell you. The reason is that the program was very successful and in the last six months or so, maybe a year, since the Master Plan has been discussed and all those rumors are out there which are a lot worse than what's written in the Master Plan, there was a tremendous volume of solar being built so that the supply of SRECs instead of being short is projected to be long by next year.
MR. DZURINA: Does that have something to do with our thirty percent change?

PRESIDENT SOLOMON: It has nothing to do with the Master Plan. It does have to do with the statutory targets for solar REC requirements in the coming years--

MR. DZURINA: There is a huge change in the Master Plan--

PRESIDENT SOLOMON: There isn't yet. The Legislature may act, and there have been actually a couple of suggestions here of things that can be done to stabilize the SREC market which the Legislature can do, and there are some things even that we could do, and we are looking for some constructive suggestions that might affect the reason why the REC market went down.

MR. DZURINA: I think a lot of constructive suggestions come from the oil and gas industry.

PRESIDENT SOLOMON: We had a solar gentleman here talking about putting a floor price--

MR. DZURINA: We cannot say that gas is a clean renewable energy.

PRESIDENT SOLOMON: I haven't gotten a single suggestion about preserving the SREC program from a gas company, oil company, coal company, never.

MR. DZURINA: I can tell you from my own basis that in the last three months I haven't been
able to get a project under contract. I can tell you that I taught solar and renewable energy classes since October 2009 and I have never once had three months of classes not run due to lack of enrollment until now. What is that from?

PRESIDENT SOLOMON: I just told you.

MR. DZURINA: I'll tell you what it's from, it is from the lack of growth over the last three months.

PRESIDENT SOLOMON: You're right, and I just told you why. If you have a suggestion about how to positively affect that or create some stability, tell us.

MR. DZURINA: I am not an expert on the Board of Public Utilities. I know what my business is. You are supposedly experts here. You have three people sitting there who have never written anything down, on the phone, texting during the last meeting for the last two hours.

PRESIDENT SOLOMON: We have got a transcript, I'm listening to you, do you have a suggestion?

MR. DZURINA: Yes. Leave the Master Plan alone. It was working very well.

PRESIDENT SOLOMON: It would have no impact on the current price of SRECs, that's all I can say.

We can have this debate, we can do it later, but I can tell you that we have had a couple
of positive suggestions.

MR. DZURINA: I'm sure you have.

PRESIDENT SOLOMON: We have had other positive suggestions, they have all come from solar companies and financial institutions and financial projects.

I, frankly, haven't gotten one suggestion from you other than a couple of--

MR. DZURINA: The suggestion I can tell you is that my business is dead and so is many others'. I am a small business owner and I can see, when I meet with customers, I have six projects right now where the winner is up for bid, but nobody is going to be doing anything because they don't know what is going on.

I have had classes at three different colleges in the last three months, none of them filled, so something happened in the last three or four months.

PRESIDENT SOLOMON: I just told you. Do you want me to tell you again?

MR. DZURINA: Yes, tell me.

PRESIDENT SOLOMON: it is that the SREC market is no longer short.

MR. DZURINA: It is that the Master Plan has changed, which is undermining it.

PRESIDENT SOLOMON: Okay, it's your opinion.

MR. DZURINA: No, it's not-- you're right,
it is my opinion.

PRESIDENT SOLOMON: We hear you.

MR. DZURINA: I do, too.

PRESIDENT SOLOMON: Is that it? We thank you very much.

MR. DZURINA: Thank you for nothing.

PRESIDENT SOLOMON: Edith Gruber.

MS. GRUBER: Good afternoon.

My name is Edith Gruber, President of Jersey Shore Nuclear Watch.

For us the prospect of new nuclear plants is a nightmare. During the time that we have been organized in 2000, twenty municipalities have passed resolutions opposing the extension of the license of Oyster Creek. We believe that due to public pressure and private citizens it helped to reduce the extension from twenty years to ten years.

One of the problems that we have been discussing for the past ten years, we have been attending the emergency plan that has been organized by the DEP and the State Police, and most of the people there say that the evacuation plan does not work, they would not be able to get out in an emergency; it looks good on paper, but the overwhelming majority of the people there agreed with us.

In addition to that, we have nuclear waste that is piling up in our backyards. I live ten miles from Oyster Creek, there have been accidents of meltdowns. In addition to the safety
issues and the way that citizens feel, there is the issue of economics, a practical issue. The new nuclear plants are not practicable, it is expensive. I would like to refer you to a 126 page document by the Union of Concerned Scientists. They said that nuclear power plants are not economically viable, they depend on subsidies in order to exist, they keep taking. When nuclear plants started out there was an attempt made to try to give it some sustainability, and what happened is that according to the report the nuclear power industry keeps demanding more and more money. I would like to see you study that report. The report says there are all kinds of ways that the nuclear industry demands more money through loan guarantees, outright grants and tax reductions. Now I want to get to the practical aspect. Since Three-Mile Island nuclear plants have not been built in our country, they have been built in Europe and other places. Where are we going to get the help to build the new nuclear plants? That's a problem. In addition to that, 92 percent of uranium is imported so we should consider that also. I would like to see the Master Energy Plan kept the way that it is now, no changes.

PRESIDENT SOLOMON: Can I ask you a question, because it does, it specifically cites the
2008 Energy Master Plan with respect to the Global Warming Response Act, the carbon targets, and it essentially cites the 2008 Energy Master Plan, and there is a section, 713, Nuclear Generation to Satisfy the Global Warming Response Act, it doesn't say that we need to build more nuclear, it simply refers to the prior Energy Master Plan and that in order to meet those carbon targets it may be necessary, but there are a lot of if's about it including the financial issue, it doesn't advocate.

MS. GRUBER: Okay, but I want to give some more reasons why we shouldn't get new nuclear plants.

PRESIDENT SOLOMON: I thought maybe there was something in the plan--

MS. GRUBER: No, one of the words that's mentioned in the plan was that there was a dream, It mentioned the word "dream."

PRESIDENT SOLOMON: Everybody can look at pages 77 and 78, it never dreams about, talks about a dream or considers nuclear to be a dream.

It talks about how we could potentially meet the carbon targets of the Global Warming Response Act and nuclear as a carbon-free baseload generation, and that's what it discusses.

MS. GRUBER: Okay. Well, in the mining of uranium fossil fuels are used, and there is more fossil fuels, and in addition to that uranium mining is a dirty, dirty, industry, it's a polluting industry, so I would like for you to consider that...
fact.

I would like to end by saying that before Fukushima which proved to a lot of Americans, and I would like to see your opinions, that nuclear plants are hazardous, they are riskiest— they are risky, they are impractical.

Since Fukushima I believe, and we have seen people that we deal with all of the time that have changed their minds about nuclear power.

Thank you very much.

PRESIDENT SOLOMON: Thank you.

Janet Tauro.

MS. TAURO: My name is Janet Tauro.

I have the pleasure to be the Board Chair of the New Jersey Environmental Federation, and I am a very proud member of GRAMMES, Grandmothers and Mothers for Energy Safety

I would like to very much support the comments made by Christine Guhl of the Sierra Club, terrific observations, which is actually something that I was noticing during the course of these hearings in Jersey City, Trenton; it's amazing how just ordinary citizens are coming out, coming out about the Plan, not employed anywhere, but they keep coming out to express what they hope will be the vision for the future.

I think it is so much prompted by their
concerns for their children, their concerns for
their grandchildren and the environment that we are
going to leave them.

And I think that they are just really
meeting with you to be asking you to be grand
visionsaries and bold visionaries and to put us on a
really strong course of renewables.

The people want solar and wind, they want
green technology, and it really is amazing to see
how many people come out because it is very
difficult to come out to these hearings for the
average citizen.

Christine had to take off from work and
have someone do some babysitting to come here and
speak here.

So it is so important, and I am so proud
to hear so many people come and really speak about
what they want as their future.

It is very disturbing to hear support
today given to nuclear; that should not even be
considered, that should not be an option after
seeing what we saw in Fukushima and what is going
on there today. You know, it has gotten off the
front pages, but there are tons and tons of
radioactive water flowing into the Pacific, radio-
activity has entered into the food chain, milk,
cows are eating radioactive grass, there are
thousands of people who will not be able to return
to their homes not just because of the Tsunami but
because their home towns are radioactive.
And reports were issued a couple of weeks ago about the tests of the urine of children living eighteen miles from the site, and their urine was radioactive.

We can never ever allow that to happen here, ever, and we can never say, 'Oh, it can't happen here because we don't have Tsunamies," We have other things, we have very extreme weather patterns, we have hurricanes, nuclear plants are subject to human error, mechanical error, technological error, terror, and if any of those things happen the consequences are life-threatening.

And that is why we are not going to see that type of horrific outcome with anything that happens with solar installation or wind installation.

As a matter of fact, in Japan, what is interesting is that of their fifty-four reactors, sixteen are operating, and they are meeting their baseload and they are meeting their energy needs through intense conservation efforts and their windmills, and they are even considering taking, getting rid of the nuclear program completely as are Germany, Italy, Switzerland, we are seeing France move away from it and we are seeing an explosion of wind and solar technology in China.

So I would just urge you and really just beg that you can find it in yourselves to push for clean energy technology. That is what the people in
New Jersey really need. If the other countries can
do it, we can do it, too.

Also, natural gas that comes from
fracking, and the environmental effect of that is
not green technology.

Thank you very much.

PRESIDENT SOLOMON: Thank you.

Kate Hubschmitt.

MS. HUBSCHMITT: My name is Kate
Hubshmitt.

My name is Kate Hubschmitt and I work for
the New Jersey Carpenter Contractor Trust or NJCCT.
NJCCT is the labor management cooperative
of the carpenters union and their signatory

employers. NJCCT represents seventeen thousand
union carpenters and nearly two thousand signatory
union contractors throughout the State of New
Jersey. As such, my comments on the State's draft
of the 2011 Energy Master Plan will focus on job
creation within the construction industry,
particularly on the clean energy job sector.

The economic viability of this growing
clean energy industry is something we believe will
have an enormous impact on the recovery of New
Jersey's suffering construction industry.

Construction unemployment rates are down from 17.3
percent in July 2010 to 13.6 percent in July 2011.
This sharp drop indicates that many construction
workers have either left the industry to find work
elsewhere or have reached the maximum allowance of
unemployment benefits, leaving them in severe financial hardship and affecting thousands of New Jersey's working families. The lack of industry demand indicates the need for innovative investments, and we believe the development of New Jersey's clean energy industry will provide many of the opportunities needed to supply jobs for years to come.

Globally, the clean energy industry is a 2.3 trillion dollar market. As a direct result of these investments, the industry is expected to grow 20.4 million new jobs by 2030. Naturally, New Jersey has been a front-runner in clean economy market investments, spurring new industry job growth. According to a 2011 report by the Metropolitan Policy Program of the Brookings Institution, between 2003 and 2010 clean energy investments led to the growth of 152,034 green jobs throughout the New York-New Jersey metropolitan region. No other major metropolitan region in the country has yet to break the hundred thousand mark, including California's Los Angeles-Long Beach-Santa Anna hub, which grew 89,592 clean economy jobs during the same period. In 2010 the State of New Jersey alone had 94,241 jobs in the industry and 2.4 percent of all State jobs. Furthermore, the annual average annual increase in the number of clean economy jobs grew 4.7 percent faster than almost any other emerging industry.
These figures alone support the economic viability of this growing industry. For this reason, the Carpenters have remained steadfast in transitioning much of our advanced training programs to focus more heavily on sustainable building, including the construction of new forms of energy generation, including wind and solar.

Investment in new technology will inherently increase the demand for a highly-skilled and specially trained workforce that is knowledgeable and prepared to build tomorrow's clean energy sector. In this regard, the Carpenters Union has been and will continue to be keenly focused on enhancing our training programs, including upgrade training to meet green standards and clean energy trends. By investing in these programs, the Carpenters are committed to increasing New Jersey's competitiveness in this growing, multi-million dollar industry.

The potential for job generation is significant, but investments in clean energy markets are multi-layered. The growth of the industry will also reduce our dependence on foreign sources of energy while simultaneously reducing environmental harm, things we see as universal benefits. The State's dedication to increase in-State energy production is something we feel should continue to be a focus of our State's leadership.

Investment in clean energy infrastructure lays out a long-term plan for job growth and removes
thousands of construction workers from the long-term unemployment that is stunting New Jersey's economic growth. The Carpenters Union and their employees are committed to ensuring that New Jersey remains competitive for years to come.

PRESIDENT SOLOMON: Thank you.

Justin Murphy.

A GENTLEMAN: He left.

PRESIDENT SOLOMON: Ethan Sprague.

MR. SPRAGUE: Thank you for the opportunity to stand and speak this afternoon. I am Ethan Sprague.

I have been listening and listening to a bunch of different people's visions of energy in New Jersey's future.

I am not going to tell you what to do with your vision, I am only going to tell you what I know about the residential market and the innate value that that has in New Jersey.

The SunRun Company started in 2007 in California. The model is and was to create residential solar and make it easier for solar installation. The model has quickly taken off and in 2009 we came to New Jersey. We had about twenty five hundred customers under contract in New Jersey and we buy solar panels locally, so we reinvest it into New Jersey to purchase systems that go into
customers' homes and then they pay for the energy. This avoids the up-front cost that would be a barrier to going forward.

So that the twenty five hundred customer contracts represent an investment of over a hundred million dollars in New Jersey.

PRESIDENT SOLOMON: I have a question: Is it a residential PPA?

MR. SPRAGUE: Exactly, yes.

PRESIDENT SOLOMON: Does the model depend on a residential customer, or would it apply to small businesses and commercial also?

MR. SPRAGUE: It could apply, but we don't apply it to that level, we are just doing residential. We want to see everyone have the opportunity for that and take away the barriers as to that.

We are investing about 1.4 million dollars a day in solar equipment across the United States, so it's been pretty popular.

And we have seen prices in the market change dramatically in the last three years.

That gets me to the Energy Plan.

The (inaudible) report says, it cautions the BPU about the limits and uncertainties associated with the data in the analysis that was provided.

In the Energy Master Plan it also talks about not picking winners and losers, and as we are looking at this vision I think it gets more viable
if the data in the analysis that underlies the vision is supported.

So I will go into five different recommendations about the Plan related to the data, and it is all focused on the cost analysis of solar, and particularly what I would like to focus on is residential solar cost.

The first page I'd like to turn to is page 6, that solar is more costly than other energy sources, it uses a figure of $390 per megawatt hour and there is reference to a capital cost, and if we go back and look on page 22 of that report, and the 2008 and 2010 data, there is a June 2011 figure, a high end of $192 per megawatt hour, roughly half of what was reported in terms of price.

The second point I would like to point out is on figure 41 on page 93 gives the cost in cents per kilowatt hour, if you look at it, it's about thirty-five cents per kilowatt hour. This is based on a 2 kilowatt system. The average system size for residential in New Jersey is a much smaller system, so I think this will skew the numbers, we are showing a much different cost per kilowatt hour.

PRESIDENT SOLOMON: What number are you showing?

MR. SPRAGUE: It would depend on your assumptions, that was the point I was just making, if you assume tax credits and other things, you have got to spell it out to get a reasonable analysis. I
would be happy to provide something on that.

PRESIDENT SOLOMON: If you could submit supplemental written comments, we would love to get something.

MR. SPRAGUE: Okay. The third point I would like to make, on page 94 it estimates the annual cost to the State of SRECs at a half million dollars by 2013, Table 4, page 106, Table 4 uses SREC prices at 35 percent --

PRESIDENT SOLOMON: We know that the price has dropped significantly in the past few months.

MR. SPRAGUE: So it's the price today, not in 2015, so I think that piece of the analyst could be updated.

The fourth point, on page 96, that number is actually the number reported for 2010. The number for 2011 is $226,000 which is 22 percent less.

PRESIDENT SOLOMON: Is that based on the diminishing SREC price?

MR. SPRAGUE: No, that's his opinion--

PRESIDENT SOLOMON: No, I'm saying your 2011 projection.

MR. SPRAGUE: The 2011 projection is the (inaudible) projection, and then 42 percent less, my projection is even less than that based on the other inputs.

PRESIDENT SOLOMON: I have got it.

MR. SPRAGUE: I think it is also pertinent
to know in the report that says, "The employment benefits from installing and maintaining solar slightly outweighs the economic benefits of higher electricity prices," on page 103 of the Spiegel report.

I think actually based upon the numbers they were looking at, which are outdated, the finding would be much stronger if run today with updated numbers.

Lastly, the last point I want to make about the specific EMG is that on page 73 it states solar costs will be 2.6 percent of the total retail electric market in 2012 even through solar power is less than 1 percent of the electric power."

That is based on Table 6, that has the SREC prices in there, and when I look at this I'm curious as to what underlies that figure, and I wonder if the fact that solar is producing during peak hours so that the value that it is offsetting is greater, I'm wondering if line losses are considered in that so that not only would the cost data that went into that perhaps be outdated but that it wasn't a robust analysis of the specific benefits.

That gets me to a couple of points. If you look at the different energy resources, and in particular, the first one is a broader economic benefit from residential solar. The report cites in a couple of places that residential is higher. The
reason it is higher is because of the local jobs, and as costs go down what remains is the local jobs piece, so the investment that we are making, that hundred million dollar investment system has also been creating local jobs.

And the purchase of goods and equipment should be looked at, too, and those would come in at a high percent of investment, most of the investment, as I said, is jobs.

That investment also affects the income tax, sales tax, and other similar taxes such as property tax. There is a survey out in California that shows home values increasing when they have solar so that when that home sells it sells for a higher base because it has solar, and the State may get a portion of that revenue.

So the report shows almost seven thousand installs, and when we multiply that out we get three hundred million dollars invested in residential systems, so I think that is a huge amount that should be looked at. That would represent peak generation, reduced consumption, you know, residential solar is also energy efficient, there is reduced demand at peak hours, but it's even better than that because it is sending energy back at peak hours, there is reduction on the network, it encourages conservation at reduced cost and there are environmental health benefits.

The last thing is energy awareness.

When I look at the energy market, demand response is
very much like a dial-up on the internet, if you remember, there is a general awareness of the benefits of this and we are still involved in the mechanics of making it mainstream, and so I think any promotion of residential customers getting the benefit of this and seeing it in their everyday life is really going to be the basis of how we think about energy and how we use energy and would have a positive impact on our economy.

Before I conclude, I want you to understand why we believe that the residential market is fundamentally different than the commercial or other solar markets. The cost drivers really have to do with the per project total cost, the cost of sales, the cost of interconnection, SREC registration, all those costs add up to more per system, per watt than on a larger scale.

And so the things that you can do today to improve those types of processes would lower the costs. What happens is when you lower the cost for residential solar I am going to be investing in less local jobs, but there will be a bigger market and customer savings will increase, and those customers have more liquidity then to spend on goods and services I think what you lose in cost per system you gain in the marketplace.

So to the extent that you can work on
those per system costs I would really appreciate it
and I think the State would appreciate it.

The residential market will create big
support for local investment and it will save
energy and be the new frontier of energy, I know
there is some money out there that is available.

The permitting processes, there are a lot
of different and various processes and applications
and for renewing things that could be reduced. I
have a study with me that looks at the benefits in
California over nine years, and I will give that to
you as something you can --.

PRESIDENT SOLOMON: The taxes are high.

MR. SPRAGUE: The taxes are different..

The last thing I want to say is that I
think creating long-term opportunities for the
residential aspect will go a long way to stabilize
the SREC prices. Right now the way that program
works, it hasn't been extended, and an entity like
SunRun--the system can't be built yet in order to
apply, there is a lot of paperwork that needs to be
filled out. There are ways to streamline that.

Basically what we are doing is taking a
higher price for a shorter term contract because we
don't think we are going to get anything or as much
at the end, so we are sort of forced into taking
whatever we can now because of the uncertainty of
the future. If there was a structured SREC market
where a lower price was available for a longer term
we would be all over that and it would help
facilitate our efforts, and the sooner that can be
done the better, I think the last solicitation is in
September.

And the other thing on that, I will
submit written comments, but in conclusion I think
you should focus on cost, trying to stabilize the
SREC market through programs that maybe could be
expanded and made more user friendly and accessible.

PRESIDENT SOLOMON: Two things I want to
ask you. We are aware that over the year or year
and-a-half that this was all being being developed
that we were getting inputs that some of the numbers
and statistics would change, and they will be
reviewed. I appreciate what you are saying but we
are already in the process of trying to get the most
up-to-date date that we can.

But when you read the Master Plan, we read
it, we read it fifteen or twenty times each or maybe
thirty, we weren't looking for a conclusion, just
information, in other words, what the cost is, and
then decisions about what is to be done with that
information would be made by the policy-makers,
typically the Legislators and the Governor.

We will refresh, look at the data, we will
refresh it, and it was not the intention to reach
the conclusion but put the information out there and
let the policy-makers decide.

And my question is, do you aggregate, is
part of your model to aggregate the energy sold back
to residential buyers, or do you do it one resident at a time?

MR. SPRAGUE: We do it one resident at a time.

PRESIDENT SOLOMON: Is aggregation an option?

MR. SPRAGUE: Is it an option? I'm not sure in what context you are asking. The SREC finance programs, it requires a single obligation for every project.

PRESIDENT SOLOMON: I know, but were that not the case would aggregation work for your business?

MR. SPRAGUE: Yes. The one point I would like to make is in regard to providing access to people, what is happening now is that it is becoming harder to try to finance these projects and make it accessible to people and we would be happy to give you our ideas on that.

PRESIDENT SOLOMON: We would welcome those ideas. I think the last date is August 25th, so you can send us whatever you want to make part of the record on or before August 25th.

Earl Benner.

MR. BENNER: I would like to thank this gentleman much for your presentation, I think it was very clear as to the issue. I got most of what you had to say and I hope that you members got even more than I did, I only hope you did.

This gentleman pinpoints what we should
all be talking about. You know what caused the SREC market to go down? Very clearly, it was the over-building of solar in New Jersey. It was building more faster than what was anticipated.

And there is a point that you can make a change in that, and the change is to drop the 22 and-a-half percent requirement for the renewable energy proposal.

PRESIDENT SOLOMON: I'm listening.

MR. BENNER: There was more generation than there are requirements for the utility companies to buy it; ergo, the price goes down.

So what do we have? We have a system which has been too good, too effective, do we want to perpetuate that rather than try to change it?

I think it is clear, everybody on the panel, everybody in this room says we must go to renewable energy. It is inevitable and has to be done, and the only deterrent has been cost.

So I would just like to mention a couple of things. We have a Governor who indicates that he plans to drop the RGGI, I don't know if that's a good move or a bad move, but I was heartened by the words that the Governor made in his statement, and I would like to read just a couple of those to you.

"One of the things"--this is the Governor speaking, "one of the things that I am announcing today is that there will be no new coal permitted in
New Jersey. From this day forward any claim that
anyone has regarding any type of coal based
generation of energy in New Jersey is over. We know
that coal is a major source of CO2 emission, we
will no longer accept coal as a new source of power
in this State."

I don't know if the Governor wrote that
before or after the Harvard Medical School came out
with their cost analysis of the health costs of
ccoal. But in their report, and I hope you all have
read it or at least read the summary, they indicate
that the health cost of coal in the United States is
one-third to one half a trillion, with a T, dollars
annually, that's three hundred and thirty three to
five hundred billion dollars annually in health
costs.

And they break it out, if that cost was
proportioned to the cost of generating a kilowatt of
energy of electricity using coal, it would double,
triple or quadruple the cost.

So it is clear that the Governor is quite
accurate when he says that we should do away with
ccoal in the State and really throughout the
country.

But we also have to consider the cost of
making the switch. There has been a lot of talk
today, and again, I won't go over the cost for
solar, but I would like to call your attention to a
report on off-shore wind.

In the fiscal year 2010 the U.S.
Department of Energy instituted the Offshore Wind Innovation and Demonstration Initiative. They came up with a number, a goal and expectation that off-shore wind in the United States achieve 54 gigawatts at a cost of seven cents per kilowatt hour by the year 2030 with an interim scenario of 10 gigawatts at ten cents per kilowatt hour by 2020. Now, those numbers are right around our current costs of burning coal, so we should be doing everything we can to see to it that those goals are achieved, and we think the best way to do that is to set your goals high, not low.

The concept of the BPU putting out a Master Plan that lowers our goal to 22 and-a-half percent is setting the wrong example. So I wish you would reconsider that and perhaps make a change to that, and I think you will find that those are the thoughts that the Governor has on those issues, too.

COMMISSIONER FOX: Charles Anvrade.

MR. ANVRADE: I am retired.

COMMISSIONER FOX: You're still a New Jersey resident, you haven't retired from that, you haven't retired from being a New Jersey resident?

MR. ANVRADE: Yes.
holding these meetings, which implies that there is
going to be a revision in the Energy Master Plan.
I want to refer to the same study that
Earl just told me about before the meeting started
about the Harvard Medical School.
Now, when I looked at the 230-some odd
pages of the report, actually I concentrated on the
graphics more so than on any narrative, but looking
at the charts, it's pretty obvious that the
concentration on this study was to get the 30
percent down to 22 percent of greenhouse gas
reduction. and so that was the objective and,
therefore, the alternative energy is not shown very
prominently on that chart as is the methane gas and
the nuclear.
Speakers before me have already discussed
the health issues, particularly the radioactive
substances and nuclear reactions and the other
health issues that are discussed in the Harvard
study that should be addressed in this revision that
we hope to see.
I would want to concentrate specifically
on the health issues.

There are two questions that I have for
the BPU to consider. The first one is on the health
care cost to reduce clean air and clean water under
your 22 percent and-a-half percent reduction
compared to the prior plan of 30 percent. I didn't
see that anywhere, so that what I am asking and
hoping is that it will be considered in your next
The second question has to do with the fossil fuel industry's profit gain at the 22 and-a-half percent level against the health care losses at that level, which makes more sense for the economic health of all citizens in the State of New Jersey. So it would be great to see the health care cost benefits and cost on such graphics you have to show.

And I thank you very much.

PRESIDENT SOLOMON: Thank you.

I'm sorry that I had to step out for a second, but I will be reading the transcript and Commission Fox will be filling me in on anything I missed.

Matthew Hoke.

MR. HOKE: I am basically just expressing dissatisfaction with reducing the clean energy goal from 30 percent to 22 and-a-half percent. I would like to keep it where it is or higher.

And there are a few reasons that I think it is possible.

First of all, the reason for the reduction, correct me if I am wrong, I think it was based on the idea that the goal was to reduce the end cost for the consumers; is that right?

PRESIDENT SOLOMON: Certainly cost was a factor, but since the statute, the Solar Advancement
Act, if you look at it in the aggregate, it sets or confirms that 22.5 percent standard. We felt, number 1, it's a floor, not a ceiling, and that that floor was set and acknowledged in the past by the Legislature, that that was a policy that the Legislature could change if they wanted it changed, but there was nothing about that floor that changed or altered our ability to go higher or past it, if it was doable.

It has never been the goal of saying that we are not going to achieve the most we can, but that's the goal that was set by statute so we will adhere to that until the Legislature and the Governor tell us differently.

But it doesn't stop us from going beyond that. Just like, even though the Governor has pulled out of RGGI or he said he is going to pull out of RGGI, the Global Warming Response Act which sets the carbon target is still part of the law of the land and all of the targets set forth in that Act are still binding on us.

So whether we are in or out of RGGI, we still have the same obligations; I thought that I'd throw that out there as another example.

So the answer is that the floor has been set, we didn't change that floor, we certainly didn't say it should be raised.

I'm certain that there will be people that want to provide information, which is really what we are hoping to get, not just raise it because
we think it should be raised and we want to have that aspiration, but that your target should be 22.5, 25, 30, and here is how we think we will get there and here is what it is based on and here is what the real environmental impact is, that type of analysis is what are hoping to get. What we have got mostly is just a request that we set a higher standard without the rationale as to what is the reason for it, what is our authority to do it, and what is the net environment and economic impact.

MR. HOKE: As a little person here in the world, I would just like to use this opportunity to say that it should be higher, that would be my petition.

PRESIDENT SOLOMON: Petition away.

MR. HOKE: But if the goal is lower cost then I have to disagree with the economics of it, because, all right, I guess the idea is if you back off the industries then they have more room to wiggle and they have more room to make more money, and the extra money they make will sort of be distributed back out in the form of lower costs; but in my experience it is not what I have seen in economics.

In this market when a company gets money they just basically sit on it; that's just the reality that I have seen.

So if you are looking for a suggestion,
I'd like to see this on a Federal level.

PRESIDENT SOLOMON: Good luck.

MR. HOKE: I would like to see massive subsidization for new technology, I would like to see the State spearheading infrastructure.

I don't think there is such a thing as the overbuilding of solar until we get to a hundred percent zero fossil fuel energy grid. I look around these days and I see technologies that make me feel like I am living in science fiction, I see people walking around with little computers in their hands like from Star-Trek, and so I think that whatever we set our minds to we can do. We have a lot of unemployed people, we have a climate change problem that will only get worse the longer we ignore it, and we have a bunch of investors who rather than putting down money and creating jobs are skittish and are not investing that money and creating those jobs.

So with the Nike method, you just do it. In the 1950's the USA actually had a ninety percent income tax on the top bracket; just remotely approaching that once more would actually take that money, it's not being used by anyone because investors, again, are just sitting on it, you could put the unemployed to work and actually solve this problem and end this whole debate and that would be it.

PRESIDENT SOLOMON: I'm going to give you the Treasurer's cellphone number and suggest
that you give him a call.

MR. HOKE: I am a humble citizen, I would say perhaps the BPU could also give the Treasurer a call, I really don't know why anyone wouldn't do it unless (inaudible).

Another thing I wanted to bring up, I heard about creating a solar power plant not like solar panels but the mirror arrays and the heat it generates during daytime is actually stored at night to form this bulk.

So a lot of that is technological tripping points that we have been talking about in the past, and, again, I think rather than saying, Oh, well, we can't do these things because we don't have the technology yet, that's why they should subsidize Research and Development, so these practical problems, we can actually solve them, overcome them.

Finally, this is more of a local issue, I would just bring this up here, the town I work in, Ocean City, we recently did some tests on people's magnesium levels--no, mercury levels, and they were pretty high. I suspect that it is because of the coal (inaudible), I don't have any hard and fast data with me, I can probably get it to you later, but I suspect that's contributing to asthma and maybe some heart and lung disease in my area. They
have been given waiver after waiver after waiver.

They were supposedly going to be shut down a while ago, so if we could wrap that up that would be great, too.

PRESIDENT SOLOMON: Thank you.

Angela Jones.

MS. JONES: Thank you for the opportunity to speak. I am Angela Jones, a homeowner.

As someone who does not have a scientific background, I worked my way through the Energy Master Plan as best as I can. One thing that stood out to me was that it does not support the coal industry and we will no longer have coal in New Jersey.

Aside from my feelings about renewable energy, I don't want to rehash anything that was already mentioned, but one thing that did concern me was that there was no specific program for coal or carbon sequestration.

PRESIDENT SOLOMON: The Governor has been very clear as to that.

MS. JONES: I would like to see that in writing in the plan.

PRESIDENT SOLOMON: I will look and check the language again, I know the Governor has been very explicit and in writing, there will be no coal carbon sequestration.

MS. JONES: That's all I have to stay.

PRESIDENT SOLOMON: I shouldn't say Cogen because that implies a bias against a company, but Page 128
the proposal they apparently had on the books was
for a carbon sequestration facility up in Linden;
that's gone, that's off the table.

MS. JONES: thank you.

PRESIDENT SOLOMON: Fred Hauber.

MR. HAUBER: Good afternoon, my name is
Fred Hauber, I am the President of Eastern Energy
Service, Inc. I have lived here in New Jersey for
seventeen years.

I am here representing Eastern Energy. I am
also the President of the International
Association of Lighting Management Companies and the
Chair of the IES Energy Management Committee and the
Association of Energy Engineers Renewable Energy
Committee.

We are a full service company that
functions on both the energy efficiency side and the
energy renewable side.

I have read through the Master Plan and I
would like to thank you guys for all of the time
that you put into this. The existing Commissioners,
all of the past Commissioners, I have been working
in these programs since the utilities had it years
and years ago, and I have seen the evolution of
where all of these things are going to go, and I
appreciate the volume of work you have put into it,
it's just maddening trying to figure it all out.
Hopefully we can help you with that.

I am going to limit my comments because a
lot of what I have, including the numbers, have already been said and I'm not going to say it again so under a separate cover I will send that to you.

PRESIDENT SOLOMON: Please.

MR. HAUBER: I guess that what we need to do with all this to start with is to say that there are some modifications required in the Energy Master Plan with respect to efficiency. There are a lot more technologies available, and especially on the commercial-industrial side, nobody seems to want to promote gas, but the commodity power program that is actually run by natural gas is very efficient, and we have been working with CSG and PRC to bring some of these things forward.

I am going to recommend changes in the direct install program which may help them go forward. I have already been involved in discussions with PRC and they are right on the ball. And in teaching renewable energy for the Association of Energy Engineers, we look at all of the different types of renewables energies, and there are not many true renewables.

The biggest one that produces 6 percent of all the world's power right now is hydro. The problem is, we don't have any place where we can do hydro in New Jersey.

Tidal is somewhat there. The problem with tidal is you have to be careful with the rise and fall, the volume of flow and the redistribution of subsurface materials that may cause a slowdown.
wind, that's another good one, I am glad
to see that we are promoting off-shore wind. Right
now the State of New Jersey itself only has 5
percent of its land mass that is applicable to
solar, and so off-shore wind is a great thing to
promote, and we thank you for that.
And then we come to good old solar.
Everybody talks about solar. We actually have
invested some of our own funds in funding solar
projects. There are certain products that we cannot
offer right now just because, I will call it, a
steep depression in the SREC market.
And we all knew that this was going to
decline but nobody expected it to go to where it is
so fast. I think you need to bolster that in some
way. I don't know whether that is something that
the Board can take on or whether that has to go
through legislation and then come to the Board.
Maybe you can give us some insight on that.
PRESIDENT SOLOMON: Certainly we have to
set, and we will be setting to create stability
within a month or two to the new SACP schedules past
2016, and that will create some stability. There
have been a number of suggestions, some here today
and some in the past which includes setting up a
floor, what that floor might be, a tiered floor so
there would be some stability as to SREC prices and
enable some long-term financing and, some other
ideas that would create guaranteed bankability for
SRECs. We are listening to all that.

I don't know that there is any one answer, but they are all possibilities. Most of those issues, the bankability, the changing of the target, the number of SRECs, the setting of a floor, would probably require legislative action.

MR. HAUBER: That's a really good point. We have one manufacturer that has over four hundred million dollars to invest, and they want to use their own panels, they are made in America, thank God, and the only thing that they have said is, We can't do it in the current market, if you can convince the people of New Jersey, the Legislature of the State of New Jersey to set an SREC floor we will dump ever penny into New Jersey.

Because now they don't have the opportunity to lose their money so they have to plan for the worst case scenario, and if they get anything above that, that's great, but that takes the risk out of it.

This is why most banks have backed off with funding solar, just because they don't know what that risk is going to be.

So stabilizing the SRECs will help everything. Right now you have got cities and municipalities that may not be able to pay bonds on the projects that they did because the SRECs dropped so low, so those are some of the things that we have to pay attention to.

Solar farms, we really don't think that's...
a great idea, not even ten megawatts, because this
program from its very inception was designed for the
net metered ratepayer, and somehow this thing got
way off track and now you have got developers that
want to build hundred megawatt solar farms until
they realized that they couldn't build more than
eighty under the FERC rules, then they backed off of
that.

But coming out of the PJM queue Tuesday
was 7 megawatts of power, and when they got final
approval from PJM they realized that they lost
their financing on it, we can't build this.

And now we hundreds of applications in the
SRP registration program that has no contracts, no
one knows whether they are real or not and CSG is
getting calls from customers saying, What sort of
projects are you talking about? We are not doing
solar.

So there are people out there filling out
the SRP registrations for whatever reason they
do not know.

PRESIDENT SOLOMON: 85 percent of the
projects never get built, never go past the
application, we know that. I'm not sure we can
change that, and that's been going on forever.

MR. HAUBER: Right, and what we'd like to
do is we would like to see them come back with
making people produce a contract if they are going
to file a registration form. If they can't produce
that contract, that contract is not real, it's pie
in the sky.

That might help as far as projections of
where are we now, where do we think we are going to
be a year from now?

i think that's pretty much it, you will
see the rest of it in our written remarks, and I
know that there are other people that want to speak.

I thank you guys for all of the efforts
you put in. I have worked with some of you over the
years and we have had our ups and downs, but in the
long run New Jersey has been doing pretty good.
Right now we have a horrible problem with the SREC
and solar market and we really need to get your
attention devoted on that relatively quickly.

There are folks, some of them who
understand the problem and some of them don't, but
they all have small businesses. I know that my
company has quadrupled in size in the form of jobs
just when we added solar back into our mix.

By the way we did the solar here at

Stockton and all the new lighting sequences in the
gymnasium.

PRESIDENT SOLOMON: Are you the one who
made the lights go out?

MR. HAUBER: I didn't do that.

Thank you very much. Please help us get
through this.

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PRESIDENT SOLOMON: Thank you.

Robert Toreki.

MR. TOREKI: I am Robert Toreki.

Let me tell you a little bit about my background so you understand my role as a stakeholder here and where I am coming from.

I hold a PhD from MIT in inorganic (inaudible) chemistry, Professor at the State University of Kentucky for several years, I also did research there which was basically Kentucky's coal money at work.

I am an owner of two New Jersey businesses and now I am the proud owner owner of a 4.4 kilowatt DC kilowatt array which three months ago was going to pay off in three and-a-half years and now, who knows?

Before I get to the remarks that I want to make, I did want to respond to the earlier comment we had from these gentlemen from industry, I'm sorry, I didn't catch their names, where they came before you and they pleaded that the Societal Benefits Charges were killing them.

I am going to ask you to put no weight to that for the following reasons: 50 percent of the electricity in the United States is generated from coal power. Coal power, you have got the cave-ins, the amputations, the electricutions that occur in the mines, you have the black lung, which is the government paying the miners saying, "You are going
to live a couple of less years, here is some money."

You have the coal trucks which destroy the roads, which run over the soccer moms, you get that stuff to the plant, you burn it, you throw out the mercury, the arsinic, the sulfur oxide, the NRX, the particulates.

The US EPA says that coal plants kill 17,000 people each year on top of all the asthma and all the other things that come with that.

And then there is the toxic byproducts, which conveniently gets dumped somewhere, not as toxic waste, although it is.

All those costs or paid for by New Jersey taxpayers and ratepayers of utilities in New Jersey.

We pay for that out of our pockets, and this guy comes here and says, You know, I really shouldn't have to pay, I am one of the biggest users of electricity here, responsible for more of that damage to the populace and I really shouldn't have to pay.

PRESIDENT SOLOMON: I don't want to interrupt you, I just want to correct something.

I don't think that he said he shouldn't pay, I think what he said was, not reduce it, there is a way to do it and charge you on SBC that will incentivise demand reduction, energy efficiency and won't penalize companies that have done it already and have maxed out, and the way to do that is not to do it on a flat scale of total number of kilowatt hours but give you more credit or a higher
MR. TOREKI: I have no problem with net metering.

PRESIDENT SOLOMON: It's not net metering; in other words, your payments would increase at peak and decrease off peak so you would have an incentive, an industry that is very energy intensive would have an incentive to cut back their peak demand.

He wasn't saying, We are not going to pay. he is saying, we pay more than we should have to.

MR. TOREKI: I understand what you are saying but I don't think that they are paying more than they should have to because they use so much electricity.

COMMISSIONER FOX: But they use it at night, it is cheaper and not imported from out of State, we are using it at night.

The coal imports during those high peak days they shut off, those guys aren't working during that peak period, they are home.

PRESIDENT SOLOMON: He wasn't saying, I shouldn't pay, he is saying that if we are all paying, let's do it in a way that incentivises energy efficiency and saves us from buying all that coal fired generation.

I didn't want to pick on Ross unless he really deserves it.

MR. TOREKI: That's fine.
I just want to give you a few points about residential solar because it is my understanding that there is an effort to try to de-emphasize residential solar installation. On a dollar for dollar basis, because it is smaller than on a watt for watt bases, residential solar costs more, that's absolutely true.

If you look at solar farms, I am watching solar farms being built by out of State companies, they come into the State, they build their farms, employ some guys; what happens to the money that they got as income? That money flows right out of the State.

With the residential installations that I have, my money, where does that come from? It didn't come from the pool of money that I am saving to buy a car or a pool or something like that, I have actually added new money to the economy of New Jersey, I took money out of another investment, the stock market, I don't want to be just anyplace, I want to be somewhere where I have a guaranteed return, almost guaranteed return, and I took money out of the stock market.

That is sixty thousand dollars I brought into the State of New Jersey for economic activity. When somebody like me does that, I am going to get my electric savings each month, I will get my four hundred SRECs every month, and I am not going to take that money and put it back into the stock
market where it came from, I will spend that money
on other stuff, I am going to spend it in New
Jersey.

And the multiplicative power of a
residential install is huge. If you think about it,
the out of State investment is a net drain even
after you consider the jobs, the solar farms--.

PRESIDENT SOLOMON: The Energy Master
Plan does not support solar farms, in fact it says
the opposite.

MR. TOREKI: The residential programs have
a multiplicative effect on the State's economy.

And in regard to the same thing, I was
really quite amazed to find out that I was limited
to installing one hundred percent of my prior year's
usage. Right now the panels that I installed are
fourteen percent efficient, panels are hitting the
market today in Europe with twenty percent
efficiency and they will be sold in the United
States next year.

I don't understand why somebody can come
in and build a solar farm in Vineland and I am
limited to one hundred percent. My neighbor down the
street, he installed solar, he would like to get
an electric car because he thinks it's great, I can

have my solar, I can plug my car in, except he is
limited to one hundred percent of his prior year's
use.

Now that he has a solar installation he has to go and plug his car in for a year or however long he wants to do that, and it makes absolutely no sense. If we want people to use electric cars and electric hybrids or switch from some other source, gas for heating, for hot water heating, we need to allow people the ability to install more than that hundred percent.

In fact the hundred percent limit penalizes people like myself.

PRESIDENT SOLOMON: I don't want to cut you off, but there was a rationale for that, that issue came up in a case that's now over so I can talk about it. We are aware of that problem and we are working to correct it.

The rationale behind it was that people who were simply in the construction phase who hadn't built the house but were looking for a revenue stream so that they could maybe buy or build more house than they could afford would use the SREC and the revenue from that as a way of doing it.

In other words, there would be a lot of projects on houses that weren't built yet or may never be built, but we go to the point you are talking about. We get it and we are actually working on it.

MR. TOREKI: One last comment about natural gas. When you look at it, coal is pretty much down the tubes as far as any new install capability
there, we are working on phasing out of coal plants. I have no problem with nuclear power, I am a realist and I don't think, especially in the wake of Fukushima thanks to one guy who didn't think very well to use generators or back-up generators, basically set nuclear power back twenty years, if not forever.

So our options are natural gas and anything else. Renewables, for us to be looking at a 22 or even 30 percent target on it or whatever seems unrealistic. Realistically we are going to have to go all natural gas or really pump up the renewables.

And the problem with natural gas is all of it is coming out of the Marcellus Shale and the shale plate, but what happens when the first aquifer gets contaminated or there is the first big industrial accident, we are going to have a public backlash and if all of our marbles are in that natural gas basket we're in trouble.

Look at Pacino (phonetic) Chesapeake (inaudible) are all looking at developing, as they should, natural gas for transportation fuel. If that catches on, demand and supply of natural gas may reestablish their relationship and natural gas prices may rise, and we may be kicking ourselves down the road that our plan hasn't taken into account the possibility the competition in the natural gas market.
PRESIDENT SOLOMON: Thank you.

John Cusack.

MR. CUSACK: Many of the people at the table know me already anyway, probably you have seen me without a tie on.

Good afternoon and thanks for listening to me and the other speakers today. You have a lot of patience to hold these meetings, having been on a local planning board I know how difficult it is to be on that side of the stage.

My name is John Cusack, I am Chairman of the Board of the New Jersey Corporation for Advanced Technology, a not-for-profit, and also President of (inaudible), a consulting firm. I

also spent a lot of time in the energy industry, working for Con-Edison, I ran businesses in Europe and the United States so I have experience in that as well.

NJ CAT is a great organization, it's a not-for-profit membership organization, it's a private-public partnership, it promotes green jobs and sound emerging environmental technology in New Jersey..

But I am not here to talk on behalf of NJ CAT or on behalf of my consulting firm, I'm here to talk about some personal beliefs of what has to be done with the Energy Master Plan.

One of the major activities, by the way, of NJ CAT is their piece of technology, and I think that's extremely important. A lot of people out
there are saying, this is a great technology, we should invest in it and there are a lot of things out there inaudible). We have to be careful of those and work on them.

I have some very personal comments relating to a friend of mine, Stu Hart, who some of you may know is the S.G. Johnson Professor of Sustainability at the Cornell Business School. He has been quoted as saying that there is a great falacy out there that renewals and energy efficiencies are too expensive.

And in fact the problem is until there is a breakthrough and an anti-gravity device comes along that's going solve all our problems, there are no silver bullet solutions to the problems you are facing in trying to balance the cost of energy versus environmental cleanliness and so on in solving the climate changes.

He said, "We do not have to wait for major breakthroughs to occur in renewable energy research before they become cost effective technology, the truth is that we have a lot of very good clean technologies now. What is lacking is a breakthrough, not a breakthrough in technology, but rather a breakthrough in how we bring the technology to the market."

There is a lot of good technology sitting out there on the shelves of corporations and universities that have this technology. And the
reason is implementing that technology would be very disruptive to the present business models.

I think the example of, you may have seen it in the papers this week, Exxon after spending decades as the largest highly valued company has been supplanted by Apple Computers.

PRESIDENT SOLOMON: For a brief period.
MR. CUSACK: For a brief period.
To me that's amazing about the benefit of going small versus going big. Exxon has been going big for years and years and Apple was going small, small, small, and you see what happened in terms of the values, Apple went from 1.7 billion in 1997 to 348 billion earlier this week.

I think you see the same problem in the energy field. A lot of the technologies that you want to look at are not practical, not because they are not good technology, but it is hard to try to site and get permits for and get permit approval for a thousand megawatt solution anywhere in New Jersey, in fact, anywhere in the Northeast, is the reality.

The solution is going to be small scale renewable distributed clean technology, many of it related to energy efficiency, and we are not just going to green the State, we are going to green the health, the store, the facilities, the hospital or school one at a time, and in the long-run all of those little pieces will add up to make the case for renewables.
To give you a quick example, right now the average building in New Jersey is about 30 percent more inefficient than the average building in Belgium. And it's not because they are nice guys or they are getting taxed higher, it's just that they have different standards of how they affect buildings.

The Building Code is part of the issue. We can make every building in our State 20 percent more efficient and we would still be 10 percent behind the Belgians. If we can reduce energy by only 20 percent, that would have a tremendous impact on transmission and distribution lines and generation.

That's not new technology, there is a lot of efficient old technology that is just sitting there waiting to be used.

A good example, Cap Still (phonetic)Microserve certified that they could meet air pollution quality standards, and what they are doing is installing in National Guard armories cogeneration units producing heat to heat the buildings and also producing hot water for the hot water units, and actually it becomes a tri-generation plant by producing electricity as well. That technology is already out there and is already being used in a lot of places.
What I am suggesting are three major points to allow this breakthrough in the Energy Master Plan, marketing this technology so it could be more commercially applied within our energy infrastructure.

The first one is that we have a very good constantly upgraded and updated on-line data base available for potential users and investors and regulators about the sustainability impacts of the technology. The performance plans that they have can be verified by independent third-parties, and then to come up with priorities or roadmaps of where to go based on relative benefits and advantages, including speed to market.

As part of that, we have heard this discussion, some of the people have commented on this, create a fast track process to move these technologies from university laboratories to clean technology incubators to commercialization as quickly as possible.

This would include regulatory permitting and also things like business plan goals. A lot of these guys are great engineers, great scientists and know how to market technology, they need guidance and technical assistance for raising capital for product marketing and operational implementation, how do you actually do it. And that's something very important for getting this technology into the market.

Demonstrating commercial scale pilot
projects, because everybody wants to be second
with this technology, not first. To get over that
bump you have to get funding for commercial scale
pilot projects.

A good example of what's been done funded
mostly privately is BASF with a house they have in
Paterson, they were using a variety of energy-
savings technologies, not one technology but a bunch
of them to make the building energy efficient, and
it's actually very close to the commercial price in
terms of its cost.

The last suggestion is that we need for
these technologies while they are still in the R&D
phase, we certainly want to give them as much
commercialized incentive as possible and to develop
R&D and commercialization we may need lightbuld
technology changes.

I'd like to discuss funding, research

grantns, Stevens Institute had an attempt to try to
do this, but it needs some further work, it was
funded by the benefits in cost and technical
performance of a company.

These are things that you can do now, they
are not twenty years in the future. That doesn't
mean that we just do that, we still have to invest
more in longer-term technologies and do that at the
universities and we need a portfolio approach to do
that.

My last comment is, personally, and I am
speaking for NJ CAT, we would be glad to assist the BPU and the State in implementing these steps now so we would have a cleaner and more efficient energy infrastructure in this State, improved State economy, more jobs, and maintain an excellent quality of life environment for the people who live in New Jersey.

Some experts out there say we can't afford to be more energy efficient, we can't afford to be renewable. I say the opposite is true, in fact we can't afford not to be renewable, we can't afford not to be energy efficient.

There are a lot of companies out there that are doing that. One of my clients is an asset manager who picked the eighty most successful companies in the S&P 500, one of the criteria is how energy efficient they are, and in that portfolio of the eighty companies in the S&P 500 they have beaten the S&P by 10 percent over the last ten years.

So here is an example of where looking at energy efficiency is not something in the future, but something that you can do now and implement it within months and have an immediate effect, and that will make it easier to meet whether it is the 30 percent goal or 22 and-a-half percent goal, whatever goal we have for renewable energy, and we can get the energy use down, it's a lot easier if we make renewables a bigger part of the portfolio.

That's what I am suggesting and we will submit our written remarks to the BPU.
PRESIDENT SOLOMON: Thank you.
Donna Henry.
MS. HENRY: Good afternoon.
I am here as a resident of New Jersey.
In past years New Jersey has led the
nation with cutting-edge policies designed to curb
global warming, reduce air pollution and promote
clean energy.
Instead of supporting the State's efforts
to move as quickly as possible to clean energy,
Governor Christie is slashing our clean energy goal
from 30 percent to 22.5 percent.
We were poised to be the national leader
in solar and wind, but this EMP jeopardizes that.
We were meeting or exceeding our clean energy goals,
but Christie is jeopardizing our safe, clean energy
future.
Not only does this undermine our goals but
the goals of our clean energy program; not only will
it hurt the environment but the economy and jobs as
well.
Governor Christie said he wants to create
a basket of options from which the State could draw
power generation in New Jersey. The problem is
what is in the basket: natural gas is obtained by
fracking, it requires a potent chemical cocktail.
Some of these chemicals can and have ended
up going to the surface and leaching drinking water
and contaminating it.
Shale gas has a greater greenhouse gas footprint than coal or oil because of the methane that is released during the shale gas processing. Coal fired power plants, we heard what they did. Coal fired power plants produce approximately one third of our carbon dioxide.

Then we have nuclear power. That is dirty. Enormous quantities of radioactive vapor are created through the nuclear pool process. Nuclear energy is marked by a number of disasters and near disasters, and you have heard about those today.

In 1930 the Scientific American published an issue on energy problems, observing that the possible exhaustion of the world's oil supplies deserve consideration. Renewable technologies can capture the power of the sun, the wind and the tides.

However, we go on struggling to control the growing energy appetite.

In 1931 Henry Ford said, "I'll put my money on the sun and solar energy, what a source of power, and I hope we don't wait until oil runs out before we tackle that."

New Jersey needs to be a state of modernizers and we need a plan that promotes clean energy. Thank you.

PRESIDENT SOLOMON: Thank you.

Brian Bovio.

MR. BOVIO: I will be brief, I know it's
been a long day for you guys. I'm here back at my alma mater.

    PRESIDENT SOLOMON: It has grown a little bit.

    MR. BOVIO: I can't recognize it.

    I represent my family business, Bovio Advanced Comfort and Energy, I'm also the Vice-President of Act New Jersey Contractors of America, two hundred contractors in the State of New Jersey.

    All I would really like to say is we would like you to continue New Jersey's success as a shining example in residential energy, there should be a continued focus on that.

    The programs do work, we have had some setbacks but I think we are starting to rebuild so that it's not a question of throwing the baby out with the bath water.

    As I said, the programs do work, homeowners are seeing it on their energy bills and our businesses have grown unprecedently over the last few years, we hire people in New Jersey.

    Thank you.

    Larry Furman.

    MR. FURMAN: Good afternoon, President Solomon and Commissioners. Thank you for extending this opportunity to comment on the Energy Master
It is a privilege to live in a state where opinions of private citizens are sought by the agents of this government, of the people, by the people and for the people.

I recently earned an MBA in Managing for Sustainability, which is kind of like management for long-term.

I would like to express my thanks to Governor Christie and his predecessor, the Commissioners and Staff of the BPU Energy Program who made it possible to build that solar array over there near the parking lot and I would also like to express my thanks to Governor Christie for the proposal to close Oyster Creek and for his opposition to the Cogen clean coal plant, which really was an experimental plant. It was originally presented as 750 megawatts at a cost of only five billion dollars if it was still on schedule and within budget.

However, it would have needed a hundred million a year in subsidies for forty years so it's a nine billion dollar plant.

And the cost of compressing and capturing and the pumping of carbon was estimated by Roger Salon (phonetic), the Director of the Case Western School of Sustainability, to be at least twenty five percent and maybe forty percent, so if you do the math, at best it's a 562 and-a-half megawatt plant for nine billion dollars, which is sixteen dollars
Solar, that's six dollars a watt and dropping, wind is I think two to three, so which is more economical?

But the Master Plan states that the goal of fullfilling 70 percent of the State's electric needs from clean energy sources may be an aspiration but is one that is achievable if the definition of clean energy is brought beyond renewables to include nuclear, natural gas and hydro-electric.

I'd like to offer two observations. You are thinking very long-term, that's great. However, if we can define coal and nuclear as clean then we are already at 100 percent clean energy. You know, there is a reality show that pictures a bunch of young people stumbling around the Shore. We can broaden the definition of art to include that show.

So coal, nuclear and hydrocracking are not clean, they are not renewable, they are not sustainable and when we consider the clean-up cost and the capital costs, they are not cheap.

A couple of things happened recently. You mentioned Fukushima in the report. On December 22, 2008 a flood at a steam plant in Tennessee put about 1.2 billion gallons of toxic waste in the (inaudible) Rivers in Tennessee and that toxic soup contained arsenic, lead, mercury, uranium and zinc, toxic heavy metals from A to Z.
The TVA estimates that the clean-up will cost about a billion dollars, which is actually okay because the TVA is booking those costs as an asset, so it is good, it adds to the GDP, but that really means that the GDP is not a good metric.

In the spring and summer of last year, beginning April 20th, and as you mentioned it in the report, for eighty-five days approximately sixty thousand to eighty thousand barrels a day, 5.1 million barrels of crude oil, and a barrel contains forty-two gallons of stuff which can be manufactured into about forty-four gallons of stuff, that spilled into the Gulf of Mexico, and I don't know how much dispersements were poured into the Gulf, but I also don't know if that shrimp is still edible.

I think with all due respect to BP, it should change its name to GPG or TBPD, which would be barrels per gulf or thousands of barrels per day.

In March of this year we saw the Tsunami, the earthquake, the meltdown of three or four different reactors, the good news is that it did not melt down all the reactors; however, three or four meltdowns is three or four too many.

In May of this year the (inaudible) plant on the Missouri River a few miles north of Omaha, the reactor was shut down to refuel. That was really fortuitous because in June, on June 6th the Missouri River flooded so that plant is now in the middle of the Missouri River. It has been shut down, it's
losing a million dollars a day because the maintenance costs I imagine are higher and they are not generating electricity. According to the Director of the Nuclear Safety Project, the risk of radiation is low but the expenses are startlingly high.

In March of last year a young man named Sarif Mobly (phonetic) was arrested in Yemen, he is from New Jersey. I imagine that as a child he watched James Bond movies. In prison he did a James Bond like move, he complained that he was sick, he asked to be taken to the hospital, on the way to the hospital he allegedly wrestled a gun from a cop and allegedly shot two cops, one of them is dead. I don't know how much of that is true, but I do know that before he went to Yemen he worked as a day laborer at nuclear plants here in New Jersey, Pennsylvania and in Maryland, and he was given unlimited access. I have a camera on my blackberry, I could take pictures and no one would know. I have done it.

And again, on June 7, 1981 Israel destroyed the reactor that was under construction in Bagdad, actually 17 kilometers from Bagdad.

We can build them and we can destroy them. These seem like isolated incidents, but if you connect the dots, they are built into the system. That's why no new nuclear plants have been built in this country since the seventies. You can engineer
them to be more or less safe until they get out of
hand, probability of an accident becoming very
expensive is almost a certainty.
If you are buying lottery tickets you are
either saying, yes, I love paying taxes, or you are
saying this million to one shot is going to pay off.
Again, if you think about it, we saw
Three Mile Island in '79, Chernobyl in '86,
Fukushima this year, five meltdowns, one partial
meltdown, so the probability of a meltdown or a
partial meltdown is one every nine years. That's
empirical data. We can now say with some certainty
that the probability of a major disaster is and has
been one in nine years.
We know we need energy; the question is
not should we shift the paradigm, but how and how
much time will it take, how many people do we need,
where do we find them and how do we train them.
We can do it in ten years, that would be
aggressive. We went in ten years from nine
kilowatts at six installations, Commissioner Fox
was here, to about three hundred megawatts, so going
from three hundred megawatts to seven gigawatts in
ten years, that might be tough, so maybe we should
do it in twenty-five years.
Germany will be at 40 percent by 2025 and
a hundred percent by the mid '60s. Where there is
no fuel there is no way. Rather than consume
resources we can and should harness processes.
Thank you.
PRESIDENT SOLOMON: Thank you.

Captain Joel Fogel.

CAPTAIN FOGEL: President Solomon and Commissionrs, I just wanted to again thank you. I am going to make a presentation today that is totally different from what you have been hearing. I am coming to you as a resident of sixty-seven years of the State of the New Jersey, not only a resident but a proud resident; I love this State.

I am also Chapter Chairman of a group called the Explorers Program, six thousand members worldwide, we have people like Buzz Aldrich, (inaudible) Hillary, John Glenn, all members of our organization, they are scientists.

I am here also as President and Executive Director of Water Watch International, a non-profit organization that's been around since 1970, I worked with Jacques Cousteau, he gave me this interest in environmental care and that's why I am here today.

But there have been some problems along the way. New Jersey in my opinion is a leader in the United States in many ways and stepping in the right direction at the right time, from water quality analysis where we came up with various Acts, the Water Pollution Control Act that helped not just our state but our nation focus on situations like water pollution in our rivers and in our lakes, it
goes back a long time.

In 1970 in a kayak, I went along the way and I saw the worst pollution you could imagine along the coast, but New Jersey is one of the first to create deal with the pollution.

If you gave me two days I could take you to places you couldn't even imagine in your own State, places that are magnificent, rivers, magnificent parks; I love this State.

But I could also show you some problems along the way. I could show you Barnegat Bay, which has problems with overheating and overindustrialization, and I could show you other things as well, the effects on our ocean from too much coal and too much oil, too much mercury.

And I can take you to my doctor's office and show you my examination of what is the impact on me from places like (inaudible). I was an iron man once, that's right, I competed in national competitions, I won gold, they called me spaghetti man.

My wife has had lung cancer and I have Crone's, so I have to think that there is some impact here, exactly how and what-- but here is my point: I am here to encourage you people, you Commissioners; you have a tremendous responsibility. Thank you for taking this responsibility, but I want to encourage you to keep going in the right direction.

With is the right direction? I have one
more hat, I sit on on the New Jersey Tourism Council, Co-Chairman. The imagine of this beutiful State which earns hundreds of billions of dollars in all kinds of associated touristic endeavors, you know, we don't have to go to the movies, we are living in it, this is paradise. We must keep it that way, we need to continue to try to hold on to the beauty that surrounds us.

Don't let putrification impact our bays and rivers with water pollution and air pollution. Stand up, be proud, remember it's your children and grandchildren, I have eight grandchildren and I want them to be as proud as I am to be living here. We are living in paradise; let's keep it that way.

PRESIDENT SOLOMON: Ladies and Gentelmen, that concludes our third and final Master Plan public hearing. We will have a continuation of the Trenton hearing so you probably won't be hearing anything from us until we have had a chance to review the finish of the last set here, review the transcripts, review the attachments, review the written submissions and updates on the numbers and research.

Thank you all for coming.

(Adjourned.)
I, William Sokol, Certified Shorthand Reporter of the State of New Jersey, License No. 30X100030700, and Notary Public of the State of New Jersey, do hereby certify that the foregoing is a verbatim record of the testimony provided under oath before any Court, Referee, Commission or other body created by statute of the State of New Jersey.

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