

1 NEW JERSEY BOARD OF PUBLIC UTILITIES

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4 ENERGY MASTER PLAN

5 PUBLIC HEARING

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

8 RICHARD STOCKTON COLLEGE, POMONA, NEW JERSEY

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11 B E F O R E: LEE A. SOLOMON, President

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

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

14 PROVOST KESSELMAN: Good afternoon.

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

22 Energy Master Plans are crucial for the  
23 development of the State's long-term energy  
24 policies. Most certainly, the public's awareness  
25 and feedback is essential to this process and we

5

1 thank you all for being here today.

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

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

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

15 This represents the single largest grant  
16 for a construction project in Stockton's history,

17 and, over the next six months, we expect to boost  
18 our solar capacity by another 1 megawatt with  
19 additional solar panels installed at the parking  
20 areas within our North Residential Housing Complex.

21 In addition, our brand-new Campus Center  
22 features a number of environmentally-friendly  
23 benefits, including:

24 The heating and cooling system runs about  
25 30 percent more efficient than standard

6

1 construction; water use is about 40 percent  
2 less than average, and; low-emitting paints,  
3 coatings and adhesives were used throughout the  
4 building.

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

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

14 Thank you.

15 PRESIDENT SOLOMON: Thank you.

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

18 SENATOR WHELAN: First of all, on behalf  
19 of South Jersey, we are very grateful that you have  
20 come to Stockton in South Jersey to give us here in

21 South Jersey an opportunity to participate directly  
22 in these hearings.

23 We have an enormous challenge in this  
24 country and in this State in terms of energy. That  
25 challenge very simply is that we as a nation, quite

7

1 frankly, are behind the rest of the world. Europe  
2 is well ahead of us in terms of off-shore wind.  
3 England and Denmark, they spourt windmills the way a  
4 field sprouts dandelions .

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

12 we have done a lot of good things in New  
13 Jersey and this plan calls for the continuation of  
14 many of the good things. Certainly the SRECS  
15 legislation made us number 2 in terms of  
16 installation of solar panels.

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

23 Similarly with windmill production, we lag  
24 behind, like I said earlier, the rest of the world.  
25 Particularly for us in South Jersey I think while it

1 is a challenge it is also an opportunity.

2 we once upon a time had a thriving glass  
3 industry in South Jersey, hence, Glassboro.

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

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

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

25 So we welcome them but we also would

1 welcome them that much more if those things were in  
2 fact manufactured right here in Atlantic County, New

3 Jersey.

4 I was at a conference last week, and I  
5 have not had time to verify this, but one of the  
6 things that came up is you can save twenty percent  
7 of your cost of a windmill, an off-shore windmill  
8 project, if in fact the product is produced locally  
9 instead of buying it abroad and shipping it here, if  
10 it is manufactured here and doing the final touches  
11 on-site.

12 I know there are many other speakers.

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

18 PRESIDENT SOLOMON: Thank you, Senator.

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

25 So I appreciate your time. It's good to be

10

1 in Atlantic County.

2 SENATOR WHELAN: Thank you.

3 PRESIDENT SOLOMON: Thank you.

4 Fred DeSanti.

5 MR. DE SANTI: Good afternoon, President  
6 Solomon and Commissions and members of the New  
7 Jersey Energy Master Plan.



8                   My name is Fred DeSanti and today I'm  
9                   pleased to be representing Frank DiCola, President  
10                  and Chief Executive Officer of DCO Energy, which is  
11                  in partnership with South Jersey Industries and  
12                  proudly headquartered here in May's Landing.

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

21                  Projects supporting major New Jersey  
22                  employers like DCO Energy's prior cogeneration  
23                  facilities helping Geon Industries in Pedricktown,  
24                  our Vineland Municipal facility supporting the  
25                  thermal energy needs of Progresso Foods help make

11

1                  New Jersey businesses more energy efficient and cost  
2                  competitive.

3                  Close by, New Jersey casinos also employ  
4                  state-of-the-art cogeneration infrastructure like  
5                  our Marina Thermal project at the Borgata Government  
6                  facilities, saving cost and energy include our Essex  
7                  County Correctional CHP, landfill gas collected and  
8                  producing electricity at Atlantic, Burlington,  
9                  Salem, Sussex and Warren Counties, our solar  
10                  installations for the City of New Brunswick and  
11                  Seabrook Farms.

12 All of these facilities would not be  
13 possible without the policy support of New Jersey  
14 and we want to commend the Board and those who  
15 worked hard to create this draft report for their  
16 continued endorsement and the policy framework  
17 necessary to carrying these energy and cost savings  
18 technologies far into New Jersey's energy future.

19 The plan's goal of developing 1500 Mws of  
20 distributed generation combined heat and power is  
21 ambitious, but clearly tractable and will challenge  
22 sour industry to seek high quality applications  
23 that will minimize the economic and environmental  
24 net benefits. Clearly, it is not unreasonable to  
25 undertake net benefits evaluations to prove that

12

1 projects are aligned with our State's energy policy  
2 goals

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

11 we also are very pleased to see the Energy  
12 Master Plan' support for an emerging new sector of  
13 combined heat and power that can create district  
14 energy systems to help our State's major urban  
15 areas. District energy systems can be of significant  
16 value in reducing energy infrastructure capital

17 replacement costs for government and educational  
18 facilities and significantly improve energy  
19 efficiency, lowering operating expenses now and into  
20 the future.

21 A number of feasibility studies are now  
22 underway throughout the State and we look forward  
23 to working to develop these vital resources,  
24 particularly at this time when the economic and job  
25 creation impacts would be most welcome. After all,

13

1 our cities will always have needs for hospitals,  
2 universities and institutional support facilities.  
3 These needs will never go away and neither will the  
4 need to see that those facilities run as energy  
5 efficiently and cost effectively as possible.

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

16 we would be remiss if we did not recognize  
17 the support of the Governor and our Legislature in  
18 creating laws that facilitate the movement of CHP  
19 power, reconcile sales tax implications on primary  
20 fuels and the sale of electricity across property

21 lines within the thermal loop. Reconciling utility  
22 standby charges across utility boundaries, virtual  
23 net metering proposals that will help balance  
24 thermal and electrical output and other  
25 forward-thinking proposals now being considered will

14

1 also be of great assistance in meeting the goal of  
2 1500 Mws of new combined heat and power capacity by  
3 2020.

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

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

23 Clearly, Board review of projects over 10  
24 Mws is needed, as is envisioned in A-2529. We also  
25 think that the program's rapid success over the past

1 year in particular should give rise to some  
2 consideration to evaluating the 2013 SREC market in  
3 as much as it is critical to the industry as a whole  
4 for business continuity reasons. We would ask,  
5 therefore, that you appropriately consider the  
6 potential consequences resulting from the coming  
7 confluence of the significant overbuild concurrently  
8 with the anticipated loss of Federal ITC cash  
9 funding in 2012. This looming threat is of  
10 considerable concern.

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

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

25 PRESIDENT SOLOMON: Thank you, Mr.

1 DeSanti, and especially thank you for being brief.

2 Dr. Ed Salmon, a former President of the

3 BPU, but we still spell our names differently and  
4 were we are not related.

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

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

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

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

17

1 number 1 goal.

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

7 I am also pleased that the Energy Master

8 Plan focuses on pursuing a mixed basket of options,  
9 because I think a mixed basket and putting everybody  
10 in that basket is so important, whether it is  
11 nuclear, natural gas, renewable energy efficiency  
12 or innovative technology.

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

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

24 A new nuclear facility will create jobs,  
25 improve system reliability and help us achieve our

18

1 greatest greenhouse gas reduction goals. So the  
2 direction that the Master Plan takes on nuclear I  
3 think is right on track and going in the right  
4 direction.

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

11 The Commission especially has to look at

12 innovative programs, whether it be electric, natural  
13 gas, water, of how we are going to replace  
14 infrastructure. It is probably one of the biggest  
15 challenges we face in our nation today, not just in  
16 New Jersey.

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

19

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

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

14 we have a lot of models of success right  
15 now in the State of New Jersey.

16 I am really concerned that we make sure



17 that we are benefitting all of our citizens in the  
18 State when it comes to solar, particularly  
19 governmental, educational, health care facilities,  
20 enabling those entities to install solar, providing  
21 a great value in sending those lower costs on to the  
22 taxpayers.

23 what I would like you to consider is maybe  
24 we need to look at establishing a three tier system,  
25 maybe a four tier system. I think tier 1 would be

20

1 projects that are for the public good, schools,  
2 colleges like here at Stockton, hospitals and  
3 government. The last thing we need to do is to have  
4 the educational institutions of our State, to have  
5 the colleges and to have the hospitals all tied to  
6 solar and then find that they can't interconnect, so  
7 there has to be some provision for those kind of  
8 facilities.

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

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

19 I just think that we are looked upon as  
20 the leader in the nation along with California in

21 solar and renewables, I think it is a position that  
22 we want to continue in , but I think we are going to  
23 have to adjust and make some of these changes in  
24 order that we can move forward and aggressively  
25 continue to be able to provide relief to taxpayers

21

1 when we talk about government, when we talk about  
2 education and the tax bills that are paid or relief  
3 to patients when they go to the hospital so that  
4 they can reduce their health care costs by a million  
5 dollars since we have been able to install solar.

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

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

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

23 PRESIDENT SOLOMON: Because we are going  
24 to hear either now or later ideas about floor  
25 pricing, tiering SRECs and thing like that and I

1 didn't want there to be any confusion.

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

7 PRESIDENT SOLOMON: Thank you.  
8 Matt Davey, Petra Solar.

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

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

14 A VOICE: Can't hear.

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

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

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

1 creation and technology development in the State.

2 Because of the State's renewable energy

3 policy, specifically the RPS, the SREC market, Petra  
4 Solar is now installing our innovative Sunways Smart  
5 solar system which combines solar energy  
6 generation with smart grid technology and the  
7 deployment of forty megawatts to Public Service  
8 Electric and Gas.

9 Using New Jersey's electrical capital,  
10 Petra Solar alone has grown from fifty employees in  
11 2009 to 170 in 2010.

12 On behalf of Petra solar i would like to  
13 offer the following comments in six areas of the New  
14 Jersey Master Plan.

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

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

25 We also support the administration's view

24

1 that this is a floor, not a ceiling.

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

8 to ratepayers.

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

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

25

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

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

11 Fourth, the cost of solar energy: when

12 evaluating the cost of solar energy versus other  
13 energy sources, the Federal subsidies associated  
14 with fossil fuels, the exception of fracking from  
15 the Clean Water Act, the environmental and health  
16 benefits of clean energy, including CO2 reduction,  
17 and job creation and resulting indirect economic  
18 benefits should be considered.

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

25 For example, grid reliability with smart

26

1 solar technology helps keep voltage stable during  
2 cloud passes.

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

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

13 These studies clearly indicate the value  
14 of energy storage from generation to the end  
15 customers, including the energy market. The  
16 cutting edge of clean energy technology is energy

17 storage, and we urge the State to continue with  
18 leadership as to this technology as it has gone  
19 forward.

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

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

4 Thank you for the opportunity to be here.

5 PRESIDENT SOLOMON: Thank you.

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

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

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

20 MR. DAVEY: I can get back to you on that,

21 I don't want to speak on behalf of PSE& behave.

22 PRESIDENT SOLOMON: On that, please.

23 We would be interested in getting that  
24 information because that factors into some of what  
25 we are doing, but also on the storage side--and I

28

1 don't mean to tread on Commissioner Fox's things  
2 because that is her, one of her missions is the  
3 storage issue--the storage technologies that are out  
4 there and available, because that is a game changer  
5 for solar and wind.

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

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

15 MR. DAVEY: We will submit comments.

16 PRESIDENT SOLOMON: Great.

17 Marissa Travaline, South Jersey  
18 Industries.

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

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

24 South Jersey Industries is a publicly  
25 traded energy holding company that is parent to



1 South Jersey Gas as well as South Jersey Energy  
2 Solutions, which is comprised of our un-regulated  
3 subsidiaries. South Jersey Energy Solutions  
4 companies specialize in energy services ranging from  
5 CHP, thermal plants and cogeneration to large-scale  
6 solar arrays and residential and commercial HVAC  
7 service

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

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

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

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

1 we were very happy to see inclusion of  
2 Marcellus Shale gas in the Master Plan.

3                   Based on its availability of supply, price  
4 stability and environmental benefits, we firmly  
5 believe that natural gas can and should be the  
6 centerpiece of the Energy Master Plan. In  
7 conjunction with renewable energy resources, natural  
8 gas fired generation and combined heat and power,  
9 also known as cogeneration or CHP, have a critical  
10 role to play in supporting the energy needs of our  
11 State. As you know, CHP is a highly efficient form  
12 of electricity generation using waste heat to  
13 produce steam or hot water for manufacturing  
14 processes or space conditioning purposes.

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

21                   For the past ten years our Marina Thermal  
22 facility provides heating, cooling and both heated  
23 and chilled water to the guests of Borgata Hotel  
24 Casino and Spa in Atlantic City. This technology  
25 continues to deliver considerable efficiency and

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1 cost savings over traditional HVAC systems,  
2 providing electricity to power the thermal plant  
3 and reducing the demand on electric transmission and  
4 distribution systems.

5                   As highlighted in the proposed Energy  
6 Master Plan, distributed generation and CHP  
7 resources improve system reliability and utilize

8 fuel more efficiently, particularly for commercial  
9 and industrial customers, where the net income and  
10 environmental benefits can be more quickly realized.

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

19 As you know, the proximity of this  
20 reliable, abundant and cost effective resource will  
21 enable New Jersey to use Marcellus Shale natural gas  
22 to support our State's energy needs for some time to  
23 come. Shale gas will help level the playing field  
24 for manufacturers in New Jersey using gas as a fuel  
25 source, creating incentives to locate new

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1 manufacturing and industrial business here. It  
2 will stimulate the new power generation technologies  
3 that have a critical role to play in achieving  
4 energy efficiency requirements. It will improve  
5 reliability from a secure supply, reducing the risks  
6 of interruptions due to weather, effectively helping  
7 to drive down consumer costs.

8 And finally, perhaps most importantly,  
9 this resource has proven its potential to  
10 jump-start economic development and spur job  
11 creation through pursuit of the infrastructure

12 needed to accommodate transmission.

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

33

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

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

11 PRESIDENT SOLOMON: Thank you.

12 Paula Gotsch.

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

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

25 I have read Governor Christie's press

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1 release statement, and I was glad to hear that he  
2 talked about that he knows so much about smart grid  
3 and all that will come with that, the jobs that  
4 will come with the smart grid.

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

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

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

17 solar, we all know the prices on that are  
18 dropping rapidly, and we talked about storage, and  
19 as we learn more about storage in New Jersey we'll  
20 be able to do a lot more with it, and energy

21 efficiency, so those are some of the renewables and  
22 some of the efficiencies.

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

35

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

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

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

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

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

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

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

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

20 Germany plans to close down their  
21 reactors by 2016.

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

1 when you think of all of the things that  
2 are not solved with nuclear energy because oif

3 concern about the fact that there are so many tons  
4 of nuclear waste in New Jersey and people want to  
5 know why, they want to know why they wanted hot  
6 storage, which is where nuclear casks are stored  
7 because right now those casks are vulnerable.

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

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

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

22 I do disagree with the statement that we  
23 should not pick winners and losers. we should pick  
24 winners and losers, we should pick sustainable  
25 energy, we should pick the most economical ones and

□

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1 there is no need--for the people that say we need  
2 the whole mix, we don't. we need to go with  
3 sustainable energy, energy that is going to be good  
4 for our kids in the future.

5 Thank you very much for your attention.

6 PRESIDENT SOLOMON: Thank you.

7 Richard Colby.



8 MR. COLBY: I would like to make two  
9 hopefully constructive criticisms to your Energy  
10 Master Plan.

11 PRESIDENT SOLOMON: Constructive  
12 criticism is always welcome.

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

21 PRESIDENT SOLOMON: There are a few  
22 paragraphs about gas.

23 MR. COLBY: But it is the largest single  
24 component sector of the entire energy economy, and  
25 basically you are saying you don't know how to deal

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1 with it. That is not surprising if you are an  
2 energy agency, which is what the Board of Public  
3 Utilities is.

4 You might have considered declared a  
5 component of a Master Plan dealing with energy.

6 The transportation sector uses primarily  
7 petroleum, which is a very bad greenhouse gas  
8 producer. If you think about how you could reduce  
9 the number of cars in New Jersey and in the world I  
10 think you would have to figure out that major  
11 changes need to take place in society, such as

12 getting rid of the suburbs, but we can begin to have  
13 a society that reduces the amount of energy needed  
14 for transportation.

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

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

24 I would like to suggest a different  
25 primary goal of this Energy Plan, which should be

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1 to propose New Jersey's contribution to reducing the  
2 greenhouse gas emissions which are currently at 390  
3 parts to the million to more like 350 parts to the  
4 million, which is what is needed to reduce or limit  
5 the amount of sea level rise that will take place in  
6 the next hundred to two hundred years.

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

13 we really I think need to deal with that  
14 and I hope you will.

15 Thank you.

16 PRESIDENT SOLOMON: Thank you.

081111\_Transcripts

17 David Most from Lacey Township.  
18 Councilman, how are you?

19 MR. MOST: Good afternoon.

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

23 My name is Dave Most, I am the former  
24 Mayor of Lacey Township, I am presently a  
25 Committeeman, and I want to thank you today for

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1 giving me an opportunity to speak.

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

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

15 As far as jobs, with the young graduates  
16 coming out of college it gives good sound jobs. It  
17 only makes sense to me because renewable energy,  
18 although it is a very important part of the mix, I  
19 do not believe there is enough base load  
20 electricity, and I know we consume a lot of

21 electricity in New Jersey and I think it is  
22 paramount, and I'm with the Governor and this Board  
23 in that we should be generating electricity in New  
24 Jersey because we see our economy falling and it is  
25 all about jobs, jobs, jobs.

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

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

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

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

25 I want to thank this Board for being

1 engaged and commend you on doing a good job on the  
2 Energy Master Plan and I would really like to thank  
3 you for including Lacey Township

4 PRESIDENT SOLOMON: Thank you.  
5 Cathy Sims, Ecological Systems.

6 Is that a company?

7 MS. SIMS: Yes.

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

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

17 Thank you.

18 PRESIDENT SOLOMON: Thank you.  
19 Sky Sims.

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

23 For the cost of six dollars per year per  
24 person we are transitioning to the use of clean  
25 energy from coal, fossil fuels and the most

1 dangerous and expensive of all sources, nuclear  
2 power plants.

3                   Solar now generates more than one percent  
4 of our daytime energy needs. Due to line losses and  
5 strain on the grid, the one percent peak energy  
6 generation actually represents closer to two percent  
7 of our daily energy needs at a saving to ratepayers  
8 over the past decade.

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

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

22                   The State of New Jersey by my  
23 calculation has been able to reduce far in excess of  
24 twenty-seven million dollars to the additional tax  
25 revenues, salaries and the capital expenditures

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1 created by these companies.

2                   This is in addition to the seventy-six  
3 million dollars a year of energy being generated  
4 by the solar systems installed in New Jersey so far.  
5 These systems have an expected life in excess of  
6 forty years, which means that these systems will  
7 generate approximately four trillion dollars of

8 usable energy for the State of New Jersey during  
9 their lifetime.

10 if we continue forward in our current  
11 pace we can turn this four trillion dollar revenue  
12 stream into two hundred trillion dollars for the  
13 State of New Jersey and its citizens. Considering  
14 the initial deployment cost of these systems and  
15 that the citizens of New Jersey have shown a great  
16 willingness to cover the thirty percent remaining  
17 cost in conjunction with the State of New Jersey  
18 contributing only about fifteen percent of the  
19 Initial costs, why in the world are we letting this  
20 opportunity go by at a time when we should be  
21 pushing as strong and as hard as possible to  
22 maximize the amount of Federal dollars it would  
23 bring into this State of New Jersey and which would  
24 give the Federal government far more back in tax  
25 revenues than we give back now. So now is our

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1 opportunity to push forward and get back every  
2 dollar we have given them in generation and also  
3 make New Jersey the number 1 energy provider for the  
4 East Coast.

5 we have got the ability now to move  
6 forward and do this, we have got the infrastructure  
7 in place, we have got the companies, the growth, we  
8 have shown that we can do it through our solar  
9 enterprises. This requires the greatest level of  
10 commitment from our representatives and the people  
11 who we have chosen to administer these programs.

12 One in three people are now likely to get  
13 cancer in their lives, cancer has become the second  
14 leading cause of death in the United States. This  
15 number has been around for the last six years. The  
16 average cost per person to treat cancer is  
17 approximately thirty-five thousand dollars, and that  
18 doesn't include their loss of productivity, their  
19 ability to go to work, it is just the hard cost of  
20 going to the doctor and getting treatment. Cancer  
21 costs is just one part of the high costs of the  
22 current means of energy.

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

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

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

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

16 The ratepayers have invested billions of  
Page 40



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

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

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

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

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

18 As for non-renewable energy, the root  
19 cause of its collapse is a combination of  
20 technological underfooting and the lack of

21 productive capacity.

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

25           As a citizen of New Jersey I would prefer

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1 the now available cheap, abundant clean energy  
2 resources, New Jersey has enough available  
3 resources to provide for the energy needs of the  
4 tri-state area and beyond. it is imperative that  
5 we don't let this opportunity pass us by.

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

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

16           Thank you.

17           PRESIDENT SOLOMON: Two questions.

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

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

23           PRESIDENT SOLOMON: And the second  
24 question is, do you have any idea of how much or if  
25 any base load or mid-merit generation, coal,

1 nuclear, gas, any of that has been displaced by  
2 solar? There is an assumption that four hundred  
3 megawatts means there are four hundred megawatts  
4 that you don't have to buy or produce, I'm just  
5 going to tell you that that is false, but do you  
6 know if it has actually displaced any?

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

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

18           MR. SIMS: I'm talking about the ability to  
19 generate energy. We are talking about shutting down  
20 the nuclear plants, absolutely which will reduce --

21           PRESIDENT SOLOMON: I have a very simple  
22 question, if you have the answer, I'm not asking for  
23 your opinion, I'm just asking for what you can find.

24           What, if any, mid-merit or base load  
25 generation has been displaced, that is, isn't

1 running, because of solar? If you don't have it,  
2 try to find it, and if you can find it give it to

3 me.

4 MR. SIMS: I can tell you right now that  
5 it would be about two percent of the daytime  
6 generation--

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

10 MR. SIMS: Sure.

11 I think in terms of how much peakers

12 PRESIDENT SOLOMON: We are not talking  
13 peakers, that's a different question. That doesn't  
14 even relate to what I am asking.

15 Get me the info and the basis for it.

16 Thank you.

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

20 COMMISSIONER FOX: Deb Dagavarian.

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

24 New Jersey, the leader in renewable  
25 energy, as you know we are second nationally for

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1 solar and wind, and our current goal for generating  
2 energy from renewable energy sources tells me that  
3 the state cares about things like jobs for its  
4 citizens, minimizing pollution and not being  
5 dependent on other states for energy.

6 The last thing that we should be doing is  
7 reducing this role.

8 Both solar and wind power create new jobs  
9 than natural gas and nuclear. Solar is perfectly  
10 clean. Natural gas production necessitates fracking.

11 And nuclear energy, relying on nuclear  
12 reactors for energy is like trusting John Gotti to  
13 protect your family from violent crime; sure, he  
14 has the guns and guts to handle protection, but do  
15 you really want him hanging around your loved ones?

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

21 COMMISSIONER FOX: Jennifer Hansen, Ole  
22 Hansen & Sons.

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

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1 today.

2 Thank you for the opportunity to speak.

3 My name is Jennifer Hansen, I am with Ole  
4 Hansen and Sons. I am with an eighty-two year old  
5 company that has worn many hats over the years.

6 We started as a marine and heavy  
7 construction company, transforming under the  
8 direction of my father, Roger, into a real estate  
9 development company. Most recently we have  
10 developed multiple solar projects totalling about  
11 124 megawatts to date.

12                   And just as an aside, I would like to  
13 support what Dr. Salmon said about having a floor on  
14 the SREC program

15                   we are interested in developing a tidal  
16 energy project as one of our operating companies.  
17 After having our initial survey done by Natural  
18 Currents, we have found that tidal seas are  
19 significant in the channel waves and that there is  
20 sufficient water depth for tidal turbine  
21 installation between spans of the bridge footings

22                   we are also interested in examining the  
23 possibility of developing some of the other projects  
24 that Natural Currents has identified as productive  
25 tidal energy sites. They have been doing studies

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1 for the Department of Transportation throughout  
2 New Jersey.

3                   In researching this project we talked  
4 about the possibility of a pilot project including a  
5 number of tidal energy places, realizing that if you  
6 have a place in different locations the tides rise  
7 and fall at different times so when you look at the  
8 overall energy generation it is constant power  
9 generation. This is one of the major benefits of  
10 tidal, that is, the capacity resource provides  
11 quality dependable megawatts, unlike solar or wind.

12                   The tides rise and fall all day, all  
13 night, three hundred and sixty-five days a year

14                   There are some lulls, but if you look at  
15 it on a regional basis those lulls are at all  
16 different times, so it's important that we have

17 places in different locations throughout the State  
18           we would request that the Board consider a  
19 carve-out for tidal energy much like that for off-  
20 shore winds. We are working on some initial  
21 programs for this project and we think that it is a  
22 viable business opportunity that will create many  
23 jobs, and we would like the same consideration that  
24 is given to solar and off-shore winds.

25           Doing so will put New Jersey even further

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1 ahead with respect to renewable energy throughout  
2 the country.

3           PRESIDENT SOLOMON: Thank you.

4           David Forsyth, Gerdau.

5           MR. FORSYTH: President Solomon,  
6 Commissioners, to present my comments here today.

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

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

14           Gerdau remains very concerned about the  
15 affordability of energy to power its steelmaking  
16 operations in Sayreville. Several aspects of the  
17 State's current energy strategy jeopardize the  
18 ability of large industrial users of electric power  
19 and natural gas to compete effectively in today's  
20 challenging marketplace.

21 Companies like Gerdau are highly  
22 motivated to operate as energy-efficiently as  
23 possible due to both global competition and the  
24 major role energy costs play in their operations.  
25 The State's energy strategy should also support

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1 and facilitate these objectives and recognize that  
2 energy policy directly impacts a manufacturer's  
3 ability to compete, employ and contribute to the  
4 economy.

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

17 By utilizing scrap as the primary source  
18 of raw material in the electric air furnace at the  
19 Sayreveille mill, approximately 60 percent less  
20 greenhouse gases are emitted than by traditional  
21 basic oxygen furnace steelmaking. Electric air  
22 furnace steelmaking also uses considerably less  
23 energy than basic oxygen furnace steelmaking.

24 Gerdau has invested heavily in energy  
25 efficiency and manufacturing process improvements



1 since 2002, spending over forty-four million dollars  
2 to improve energy efficiency at the Sayreville plant  
3 during this period. These initiatives have  
4 resulted in the Sayreille plant being in the top  
5 quartile of the Gerdau North American fleet in terms  
6 of electricity and natural gas usage efficiency.  
7 And the achievement has occurred despite running at  
8 reduced capacity.

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

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

1 Yet, in spite all of these initiatives,  
2 the Sayreville plant remains in the top third in the

3 Gerdau North American fleet in terms of energy cost  
4 per unit manufactured.

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

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

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

22 Gerdau thanks the State for recognizing  
23 this as a serious problem and urges the State to  
24 take affirmative action to reverse the  
25 disproportionately adverse impact of the State's

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1 current energy strategy on large consumers' energy  
2 costs. As I stated earlier, since 2002 Gerdau has  
3 invested more than forty-four million dollars in the  
4 Sayreville facility to increase the plant's  
5 competitiveness and energy efficiency. Any future  
6 expenditure on capital projects at the Sayreville  
7 Mill will depend on the individual returns on

8 investment available from the Sayreville Mill and  
9 will certainly be subject to competition among the  
10 other twenty mills in the Gerdau Long Steel North  
11 American group. The continuing burden of the  
12 Societal Benefits Charge, for example, obscures the  
13 Sayreville plant's relative strength in energy  
14 efficiency.

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

25 New Jersey's SBCs grossly exceed

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

11 Not only are increasing SBC levels

12 counterproductive to the State's economic  
13 development objectives, but the recovery mechanisms  
14 for the SBC are also counter-productive. For  
15 example, current recovery of costs through the SBC  
16 entirely on a usage or volumetric basis is  
17 counterproductive to the EMP goals of peak load  
18 reduction. Charging the SBC on all kilowatt hours  
19 no matter when they are consumed mutes the signal to  
20 shift load to low demand periods.

21 New Jersey could make large strides in its  
22 economic development initiatives by eliminating  
23 certain, and substantially other, State-imposed  
24 charges for large volume, energy intensive  
25 employers in the State. Gerdau suggests that the

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1 State consider full exemptions, opt-outs, revised  
2 cost allocation, hard caps and SBC phase-out as  
3 options for those types of customers. Ideally these  
4 initiatives would emanate from the General Assembly,  
5 with changes to the existing statutes to mitigate  
6 the adverse impact of the State' policy initiatives  
7 on energy-intensive manufacturing customers. The  
8 Board should do what it can when it can.

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

13 Also, New Jersey should routinely  
14 benchmark its industrial electricity and natural gas  
15 prices against those in all U.S. states. This  
16 benchmarking will reveal the relative success or

17 failure of initiatives to eliminate  
18 cross-subsidization.

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

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

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

12           The State and the BPU are no longer in a  
13 position where they can "wait and see" whether RPM  
14 will work. The evidence overwhelmingly demonstrates  
15 that PJM has fallen short. Gerdau supported in 2010  
16 and now applauds the efforts that the State is  
17 taking to secure new in-State generation facilities.  
18 If the State determines that barriers to new entry  
19 cannot be overcome or that competitive markets are  
20 not present in New Jersey then the BPU should

21 actively engage in efforts to cease the  
22 "price-signal aspects" of existing market designs.

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

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

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

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

16 Gerdau is pleased that the State is  
17 promoting EE, DSM and Peak Demand reduction  
18 initiatives. The smaller customer classes will  
19 largely benefit from these programs. The State  
20 should be congratulated for developing the Large  
21 Energy User Pilot Program that just kicked off.  
22 However, the State's current EE and DSM programs  
23 costs are recovered from all customers on a kilowatt  
24 hour socialized basis without any consideration of  
25 customer class characteristics.

1           Some large energy-intensive industrial  
2 manufacturing processes, like steelmaking, have  
3 exhausted available technologies to achieve  
4 cost-effective reductions in consumption. These  
5 customers should not be subsidizing other's projects  
6 or education through state or utility sponsored  
7 programs. This results in a consumption tax, not an  
8 incentive to improve, and definitely not a reward  
9 for early response. Gerdau has in-house energy  
10 efficiency programs designed for steelmaking  
11 facilities by steelmaking experts. We don't need  
12 another program that will only pancake costs.

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

16           while Gerdau supports the State's  
17 initiatives on emerging technologies such as biofuel  
18 and waste to energy, there is no reference to waste  
19 heat recovery in the draft Energy Master Plan. If  
20 the State invests in waste heat recovery projects  
21 through funding and grants much the same way it does  
22 for renewable generation, the result is a win-win.  
23 Waste heat power generation really is a good idea.  
24 Waste heat recovery projects at industrial  
25 facilities not only make gains toward the goals of

1 the Energy Master Plan by reducing peak demand and  
2 GHGs but they increase the competitiveness and

3 sustainability of jobs and manufacturing in the  
4 State. Waste Heat Power would be available when  
5 industrial facilities are operating, generally do  
6 not require distribution or transmission system  
7 upgrades and result in lower energy and capacity  
8 costs for all New Jersey ratepayers. Gerdau  
9 submitted comments on the Energy Master Plan in  
10 late 2010 that address this issue.

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

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

18 The draft Energy Master Plan does include  
19 language about the need for solar and wind to be  
20 cost effective, which is not a concept that was very  
21 important to prior Energy Master Plans. Gerdau  
22 applauds this specific objective, but continues to  
23 question the cost effectiveness of an RPS goal of  
24 22.5 percent. If such an aggressive goal remains  
25 part of the State's energy policy, then the State

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1 must focus on ways of eliminating barriers to  
2 market-based investment and should seek to minimize  
3 or eliminate State subsidies for renewable  
4 generation. Also, the talk of five billion dollars  
5 off-shore wind projects is enough to warrant a  
6 "go-slow approach" until costs and benefits are more  
7 fully known.



8           The State should also reconsider the  
9 allocation of customers' obligations to purchase  
10 renewable energy credits. Currently all megawatt  
11 hours of energy consumed must have a certain  
12 percentage of RPS. This includes solar RECs. While  
13 most forms of renewable energy can be generated at  
14 any time of day, such as when the wind blows, when  
15 the water flows and when the landfill decomposes, we  
16 know that solar power is only generating during the  
17 daylight hours. So the question is, why are  
18 consumers obligated to purchase SRECs for energy  
19 consumed at night? The State should exempt energy  
20 consumed during the nighttime period from solar REC  
21 obligation. This would provide an additional  
22 incentive for load shifting and, therefore, make  
23 sense for many reasons.

24           To close, Gerdau emphasizes that inclusion  
25 of any initiatives or goals in an Energy Master Plan

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1 is only the first step in the process. If the  
2 Energy Master Plan is to succeed, the State must  
3 fully commit its attention and the necessary  
4 resources and consider the net impact on the  
5 industrial manufacturing base when making decisions.

6           I also emphasize that many of the  
7 suggestions provided in my comments are not new and  
8 do not need to await formal adoption and  
9 implementation of the Energy Master Plan. Rather,  
10 the Governor, the General Assembly and the Board can  
11 take affirmative steps now to address many of the

12 problems I have identified.

13 Gerdau remains willing and able to help  
14 move the process along.

15 Thank you..

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

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

24 MR. FORSYTH: Yes.

25 PRESIDENT SOLOMON: So that if you bring

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1 your use off of peak load you would be billed or  
2 charged differently and, therefore, have an  
3 incentive to stay off-peak?

4 MR. FORSYTH: Yes.

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

7 MR. FORSYTH: Yes.

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

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

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

15 Conrad Cantell.

16 MR. CANTELL: I am Conrad Cantell, and

17 I want to thank the Commission for the opportunity  
18 to speak before you today.

19 I am here today as advocate for clean and  
20 renewable energy. Renewable energy, be it solar or  
21 wind, can be counted on as a source of power for the  
22 State and the country for the claimed goal of energy  
23 independence.

24 (Inaudible) has been powered by an array  
25 of thirty solar panels since 2008. These panels

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1 provide for 35 to 45 percent of our daily energy  
2 needs and resulted in a savings of approximately  
3 one hundred thirty five dollars per month as  
4 indicated on our yearly budget.

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

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

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

20 Return on investment and return on jobs

21 creation is unprecedented. For every million  
22 dollars spent on fossil fuel energy generation only  
23 five jobs are produced, whereas the same million  
24 dollars produces seventeen jobs in the renewable  
25 energy sector.

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1 How can a State want to move backward to  
2 22.5 percent of renewable generation from the 2008  
3 goal of 30 percent? The future calls for the  
4 expansion of renewable energy, not reduction.

5 As wind and solar clean generation becomes  
6 available, the cost of both equipment and  
7 installation will continue to decline based on  
8 economies of scale.

9 Now is the time to move forward, to be on  
10 the vanguard of renewable energy as a source of  
11 energy efficiency. New Jersey has been and should  
12 remain a leader in the country and as a creator of  
13 renewable energy.

14 Thank you.

15 PRESIDENT SOLOMON: Thank you.

16 Richard Kunze, representing The  
17 Environmental Authorities Association of New  
18 Jersey.

19 MR. KUNZE: Thank you, President Solomon  
20 and Board members.

21 My name is Richard Kunze and I am  
22 representing The Association of Environmental  
23 Authorities Association of New Jersey, AEA for  
24 short.

25 we represent one hundred local and  
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1 regional public agencies that provide water,  
2 wastewater treatment and solid waste management  
3 services to communities across the State of New  
4 Jersey.

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

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

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

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

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

1 Some of these same agencies are now  
2 exploring using (inaudible) with methane energy

3 systems to process food waste, fats oils and  
4 greases which benefit the whole community by  
5 increasing the amount of clean renewable energy  
6 produced.

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

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

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

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

23 we also supported the second goal of  
24 promoting a diverse portfolio of new clean in-state  
25 generation. Numerous authorities have added solar

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1 panels to their facilities, including, but not  
2 limited to, Atlantic County Utilities Authority,  
3 Ocean County Utilities Authority, Landis Sewage  
4 Authority, Northwest Bergen Authority and Mt.  
5 Laurel Township.

6 Atlantic County and Landis have installed  
7 windmills and Bayshore Regional Sewage Authority has

8 a permit to construct a windmill on it's property.

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

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

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

22 Reducing peak demand is already part of  
23 the utilities' best management practices. Since  
24 facilities must have emergency generators and must  
25 exercise those generators to insure their

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1 reliability, it is also helpful to enter into demand  
2 response programs that reward the utilities'  
3 ability to reduce load on the PJM grid at peak time;  
4 such management produces a win-win situation across  
5 the board.

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

11 Thank you for the opportunity to comment

12 on the plan and count on The New Jersey  
13 Environmental Authorities Association to do their  
14 part in the successful achievement of the State's  
15 goals.

16 Thank you very much.

17 PRESIDENT SOLOMON: Thank you.

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

22 PRESIDENT SOLOMON: Happy birthday.

23 Michael Van Brunt.

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

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1 Master Plan.

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

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

15 We fully support the draft Energy Plan's  
16 recognition of MSW as a large untapped resource in



17 the State. As noted in the draft Energy Plan, only  
18 17 percent of the State's MSW is converted into  
19 energy. Even providing for a State-wide MSW  
20 recycling rate of 50 percent, new energy facilities  
21 could generate 1.3 million megawatt hours of net  
22 electrical energy from existing State resources.

23 As an economic driver, the construction of  
24 one 50 megawatt energy-from-waste facility can  
25 create nearly one billion dollars worth of economic

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1 activity and create approximately eight hundred  
2 direct and secondary jobs a year during the three  
3 year construction period. There are approximately  
4 fifty permanent high-paying jobs necessary to  
5 operate the facility.

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

18 Concurrently, energy-from-waste recovers  
19 ferrous and non-ferrous metals for recycling, and  
20 supplies baseload renewable energy to the grid,

21 avoiding fossil fuel combustion . Energy-from-waste  
22 generates an order of magnitude more electricity  
23 than landfill gas to energy per ton of post-recycled  
24 waste, on a much smaller land footprint. To  
25 encourage better use of the State's waste

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1 resources, we support the inclusion of energy- from-  
2 waste as a Tier 1 renewable and the continued  
3 inclusion of LFGTE as a renewable energy source only  
4 for existing landfill cells, so as to not encourage  
5 more landfilling.

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

19 Energy-from-waste facilities in  
20 developing countries have been approved to generate  
21 carbon offset credits under the Kyoto Protocol.  
22 Closer to home, the Lee County energy-from-waste  
23 facility in Florida had been generating and selling  
24 carbon offset credits for two years. The world  
25 Economic Forum in its 2009 Davos Report identified

1 energy-from-waste as one of eight technologies  
2 likely to make a significant contribution for a  
3 future low carbon global energy system.

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

10 we look forward to working together in our  
11 home State to better use our available resources for  
12 more sustainable solid waste management and energy  
13 policy.

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

16 PRESIDENT SOLOMON: Thank you.

17 Paul Kydd

18 MR. KYDD: I am Paul Kydd, K-Y-D-D.

19 I am President of a company called  
20 Partnerships1, Inc.

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

24 Partnerships1 has developed the technology  
25 to convert pickup trucks to plug-in electric hybrids

1 which will cut the fuel consumption in half, and  
2 that is significant savings for a lot of big

3 pickups.

4           In that context I am grateful to hear  
5 that the Master Plan has a section on transportation  
6 and vehicles, and I am even happier to see that at  
7 page 125 the first paragraph mentions electrical  
8 vehicles as electric storage vehicles, and I would  
9 like to expand on that paragraph.

10           The number of electric vehicles  
11 anticipated for New Jersey by the Center for  
12 Automotive Research is twenty-one hundred in 2012,  
13 rising to about thirteen thousand one hundred by  
14 2015, and that's a significant storage opportunity.

15           The batteries in those vehicles, thirteen  
16 thousand vehicles, will store something in the order  
17 of 260 megawatt hours of electric energy, and that  
18 could be made available to the grid at the rate of  
19 260 megawatts or even more, if needed, and they can  
20 take excess capacity off the grid at the same rate.

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

25           The value of this capability is

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

8 vehicles.

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

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

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

6                   So unlike many new technologies and new  
7 products, you don't have to create a market for it,  
8 that market already exists, that market is there;  
9 all you have to do is flange up with it so that you  
10 can follow it, and that's what the development  
11 requirement is.

12                   There should be a synergy with New  
13 Jersey's advanced position with solar energy. New  
14 Jersey already has net metering, which you need for  
15 this, so that is no problem.

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

25                   Finally, I would like to make the point

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1                   that this opportunity is real. The incentives to  
2 vehicle ownership are there, all you have to do is  
3 realize the latent value that the vehicle battery  
4 represents and make this connection, and the  
5 incentives then are provided by the value that you  
6 create from them.

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

14                   Thank you very much.

15                   COMMISSIONER FOX: Can I ask one question?  
16 what exactly is the incentive that you are

17 suggesting?

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

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

22 PRESIDENT SOLOMON: Thank you.

23 Roger Basin.

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

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

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

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

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

18 We are also engaged with the New Jersey  
19 DOT to survey the State to identify the top twenty  
20 tidal energy sites throughout the New Jersey

21 coastline.

22 In the past few years also the  
23 international community has requested results of  
24 this study of the New Jersey tidal energy efforts  
25 in conferences in London, San Paulo, Brazil,

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1 Moscow, Washington, D.C. among others.

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

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

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

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

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

23 We contend that a strategic vision for the  
24 energy future of New Jersey would be incomplete  
25 without specific goals to develop the significant



1 tidal energy sources that will bring immeasurable  
2 contributions to economic clean energy in this  
3 State.

4 Although New Jersey is relatively a small  
5 State, ranking 46th in the United States in land  
6 mass, its tidal shoreline comprises 1,792 miles,  
7 2,880 kilometers of potential near-shore tidal  
8 energy development.

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

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

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

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

1 In addition to the Manasquan River-Point  
2 Pleasant project, Natural Currents' permanent

3 locations in the State include the Margate Bridge  
4 in Margate City, the Shrewsbury River in Highlands  
5 and Sandy Hook, Avalon and the intercoastal  
6 waterway, Cape May, and five locations in Cumberland  
7 and Salem Counties, a 5 megawatt tidal energy  
8 project is underway in Salem and Cumberland  
9 Counties, and another 5 megawatts will be developed  
10 in Atlantic and Cape May Counties.

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

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

23 The time delay of the tidal flux along the  
24 New Jersey coast can provide baseload green power.  
25 Our preliminary estimate provides a constant twenty-

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1 four hour generation of 8.1 megawatts from 10  
2 megawatts of installed and regionally distributed  
3 tidal energy capacity.

4 Unlike other renewables that are  
5 intermittent, that have intermittency problems in  
6 connection with solar peaks when the sun is out, by  
7 strategically locating these you can get a flat and

8 desirable constant twenty-four hour green power from  
9 tidal energy.

10 2: We recommend that the BPU provide  
11 guidance and support to facilitate a T-wave, tidal  
12 wave process along the lines of the O-lake  
13 (phonetic) process, for an appropriate incentive  
14 program to support tidal energy industry development  
15 in New Jersey. We have already met with the Office  
16 of Clean Energy to initiate this New Jersey tidal  
17 energy stakeholder process.

18 3: The BPU should fulfill its advocacy  
19 function with the Federal Energy Regulatory  
20 Commission, FERC, by enabling an  
21 inter-disciplinary working group to facilitate and  
22 streamline the cumbersome regulatory and permitting  
23 process to foster tidal industry development

24 Natural Currents accepts a heavy burden  
25 of environmental analysis, we accept fully one year

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1 of baseline environmental monitoring and five years  
2 of system performance monitoring of fourteen  
3 different environmental impacts of tidal energy.

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

9 The emerging tidal energy industry is  
10 overburdened by the inefficient tangle of  
11 regulatory limitations that are arbitrary, unfair,

12 expensive, and in many cases totally unreasonable.

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

20           By way of summary, 1, facilitate a 10  
21 megawatt regional tidal project;

22           2, Establishing direct incentives for  
23 this program.

24           3, Advocacy for regulatory streamlining  
25 and coordination.

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

7           Economic stagnation is transformed  
8 through vision, leadership and bold action.

9           Not only in word but in deed, commitment  
10 and focus on specific pathways provide a road- map  
11 for success and benefits throughout the State.

12           Written comments will be presented prior  
13 to the deadline.

14           PRESIDENT SOLOMON: One quick question.

15           What, if any, transmission and  
16 distribution is available for tidal generation, is

17 that something that would have to precede it and be  
18 developed, or is there something existing that it  
19 could tie into?

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

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

5 "Yes.

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

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

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

16 But what Atlantic City Electric's  
17 contention is that there is sufficient distribution  
18 available for the kind of megawatts that you are  
19 talking about without additional investment or  
20 development, all you need is the connection?

21 MR. BASON: And the studies that may  
22 ensue, but they like it.

23 COMMISSIONER FOX: May I ask a question?

24 PRESIDENT SOLOMONT: Sure, Commissioner  
25 Fox.

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

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

12 Thank you.

13 PRESIDENT SOLOMON: Thank you.

14 Jeff Benner.

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

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

23 That goal is strongly being reached due to  
24 the solar installations that have happened to date,  
25 over five hundred, or closing in on five hundred

1 megawatts by the end of this year, forty megawatts  
2 alone in the month of June.

3 PRESIDENT SOLOMON: Are you talking about  
4 solar?

5 MR. BENNER: Solar..

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

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

13 PRESIDENT SOLOMON: That hasn't changed.

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

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

1 The drop in SRECs does not, as some people  
2 say, just look forward toward the production of the

3 best systems in the future, it also hurts people  
4 who installed the systems in the past.

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

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

14 PRESIDENT SOLOMON: Thank you.

15 Jesse Connor.

16 MR. CONNOR: Good afternoon.

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

20 Thank you for giving me this opportunity  
21 to address you.

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

25 As a citizen in each one of those

□

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1 communities I feel that I have a moral obligation to  
2 urge you to support a more ambitious Energy Master  
3 Plan than the draft that you have presented to us.

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

6 In our situation in New Jersey what we  
7 need in 2011 is a plan that is a step forward and



8 plan for the future, a future for which we are not  
9 prepared because of the global planet change, faced  
10 with a threat so potentially devastating for our  
11 small coastal state as well as the world at large so  
12 we look to our leaders for help.

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

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

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

□

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

5 Now is the time to incentivise clean,  
6 renewable energy so that we don't need to have an  
7 energy portfolio that relies on nuclear plants.  
8 Nuclear energy looks especially bad when compared to  
9 clean energy technology. Nuclear energy with its  
10 astronomical cost is potentially a terrorism target,  
11 a health and a safety issue, its waste management

12 problem and small workforce is simply not a good  
13 choice for New Jersey.

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

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

24 That leads us to another moral dilemma:  
25 Is it ethical to support a technology in

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1 Pennsylvania that we would not permit in our own  
2 State?

3 Now is the time to fully support the  
4 twenty percent demand reduction goal set up in the  
5 2008 Master Plan. As you know, energy efficiency  
6 has the greatest the return for the smallest  
7 investment. Achieving this goal will result in  
8 huge consumer and commercial savings.

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

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

15 Now, in 2011 we should be stepping up to  
16 the plate, we should be knocking it out of the park.

17 Instead this report sends our State scurrying into  
18 the dugout with our heads down, looking for a  
19 pinch-hitter, somewhere.

20 I thank you for listening to me.

21 PRESIDENT SOLOMON: Thank you.

22 Christine Guhl.

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

25 As a Sierra Club organizer, I have lived

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1 in New Jersey my entire life and I have been very  
2 proud of the accomplishments New Jersey has made in  
3 clean energy, but I am not proud now.

4 This is a real setback in 2011, this is  
5 moving New Jersey backwards. reducing the renewable  
6 energy goals from 30 percent to 22.5 percent is  
7 another step backward.

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

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

20 Jobs are incredibly important not just

21 during a recession, they are always important.  
22 Right now unemployment is in a bad stage and the  
23 recession has hit New Jersey especially hard, and we  
24 know that clean energy has really survived  
25 throughout the recession, but let me give you some

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1 numbers about clean energy.

2 Energy efficiency gives us the biggest  
3 bang for the buck, it creates between 1.5 and 5  
4 times the number of jobs of natural gas, and I have  
5 all of the references, natural gas creates 1.5 jobs  
6 per megawatt while energy efficiency creates  
7 somewhere between .2 and .6 jobs per megawatt.

8 wind creates 1.5 as many jobs as natural  
9 gas. solar PV, there are representatives of solar  
10 companies here, they have been at the last few  
11 hearings, we have seen the faces of people who have  
12 been employed by the solar industry who were not  
13 employed before, who were not employed before, who  
14 were not employed during the recession.

15 There are studies that show that solar PV  
16 creates thirteen times as many jobs as natural gas.

17 solar, wind and energy efficiency all  
18 create more jobs than nuclear, which creates about  
19 .14 per megawatt. For energy efficiency, that  
20 creates 3.3 times as many jobs as natural gas, 3.1  
21 per million for natural gas as opposed to about  
22 seventeen jobs per million for energy efficiency,  
23 and those are jobs in various fields.

24 I met with someone who because of the  
25 state's role in energy efficiency has gained more

1 work because new glass that is more energy efficient  
2 is being used more often in New Jersey, and that's  
3 because New Jersey has set strong goals for  
4 reducing demand and for energy efficiency.

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

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

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

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1 resident to someone who owns a huge company or  
2 utility, please take every comment into

3 consideration because this plan affects everyone in  
4 new Jersey.

5 PRESIDENT SOLOMON: Thank you.

6 Donald Powell, Powell Energy and Solar,  
7 LLC.

8 MR. POWELL: Good afternoon, President  
9 Solomon, Commissioners and members, I thank you for  
10 the opportunity to speak to you today.

11 I guess I would like to start off with  
12 congratulations, you have probably heard a lot of  
13 criticism, but you have created a very, very  
14 successful solar energy program. I am President and  
15 owner of a solar energy and energy efficiency  
16 company, we are a State certified energy company so  
17 we are heavily involved in programs that you  
18 created.

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

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

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

6 I would like to kind of give you a sense  
7 of grounding here, you probably know all this, but

8 in the recent past the stock market, the Dow Jones  
9 industrial average has gone down five, six percent,  
10 which has been on the front page of every newspaper  
11 in the past few weeks and has got the entire world's  
12 financial system in turmoil.

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

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

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

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1 A GENTLEMAN: 79.

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

4 MR. POWELL: Unfortunately, these folks  
5 are being thrown under the bus. A lot of them,  
6 probably most of them, have borrowed money to  
7 install the systems that support your vision and  
8 support the clean Energy Master Plan and clean  
9 energy in the State of New Jersey, they have  
10 payments to make and the cash flow is just not  
11 there.

12 I spoke to one of your people from the  
13 Clean Energy program yesterday at a lunch, and when  
14 I asked about the Master Plan and the SREC market,  
15 his advice was, well, bank them because we don't  
16 think that the SREC market is going to stay low.

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

22 Second of all, from a grass roots kind of  
23 a level, I have had two people cancel contracts in  
24 this past week due to the instability in the SREC  
25 market. They looked at it, they have seen what

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1 happened to it and they don't want any part of  
2 that.

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

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

12 Number 2, to find a way to limit the  
13 amount of solar that is approved so that it does not  
14 exceed the RPS, perhaps that needs to be limiting  
15 large scale solar installations, but the people of  
16 New Jersey who are residents, who are businessmen,



17 who are doing what they need to do and what they can  
18 do, they need to be protected, their interests need  
19 to be protected by the Board of Public Utilities so  
20 that they don't get shortchanged on the SREC  
21 market.

22 Thank you.

23 PRESIDENT SOLOMON: Thank you.

24 Susan Polk.

25 MS. POLK: Good afternoon.

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

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

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

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

18 I oppose all new coal plants, the New  
19 Jersey Energy Master Plan should set a timeline to  
20 phase out all of New Jersey coal plants, and no new

21 transmission lines that would import coal energy to  
22 New Jersey should be constructed.

23 Please, the 2008 Energy Plan goal to  
24 generate 30 percent of New Jersey's energy with  
25 renewable sources should remain intact to continue

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1 so we can have clean energy and economic growth and  
2 the 22.5 percent reduction in that plan should not  
3 be implemented.

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

6 PRESIDENT SOLOMON: Thank you.  
7 Douglas Dickinson.

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

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

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

22 I am working with Senator Whelan, I am a  
23 Councilman in Egg Harbor City and I have been  
24 working to get fiberglass workers back to work, we  
25 can do it all, we can make the parts, we shouldn't

1 be outsourcing any jobs to any other state.

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

8 PRESIDENT SOLOMON: Thank you.

9 Xavier Walter.

10 MR. WALTER: I am Xavier Walter.

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

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

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

1 we work with and support programs like  
2 Solar Read, Direct Install, Smart Smart and more.

3 We need these programs to continue to fund  
4 awarness in the marketplace through advertising and  
5 promotion. More importantly, we must maintain  
6 strict cost control with solid education and  
7 training.

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

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

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

17 we need to build a climate to encourage  
18 consumers to be more sustainable, increasing the  
19 renewable portfolio standard and supporting the  
20 Regional Greenhouse Gas Initiative.

21 And we look forward to economic recovery.  
22 we can rebuild our financial economy through energy  
23 savings measures and renewable energy to save up to  
24 thirty percent of the consumers' gas and electric  
25 bills, that gives homeowners and businesses more

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1 money to spend in the marketplace.

2 Those funds from these projects go into  
3 the pockets of employees, supply houses and  
4 domestically manufactured products, not to mention  
5 all the lunches in local diners throughout New  
6 Jersey where we meet to collaborate on best  
7 practices and improved operations and networking.

8                   With the decline of the GDP, clean energy  
9 program's focus on reduced carbon emissions and  
10 lower utility bills are the answer. These programs  
11 work in conjunction with the Department of  
12 Environmental Protection, local utilities,  
13 community action programs, the BPU and many public  
14 and private entities so that we can make a major  
15 change in our State's economy.

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

20                   We have over 2.8 million buildings in our  
21 State that need to cut their bills by a quarter or  
22 more. Energy efficiency is the catalyst that  
23 lawmakers need to put our country back on its feet.  
24 Recovery starts with a solid plan of action geared  
25 toward sustainability, job creation and

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1 environmental stewardship. Our current plan puts  
2 money in the pockets of carpenters, laborers,  
3 electricians, heating professionals, plumbers,  
4 scientists, bankers and engineers.

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

8                   PRESIDENT SOLOMON: Thank you.

9                   George Dzurina.

10                   MR. DZURINA: I am George Dzurina, I have  
11 a solar, energy solutions and construction company,

12 I have done construction for four different County  
13 Colleges around New Jersey.

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

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

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

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

13 We have an Energy Master Plan that's been  
14 working very well, it's put a lot of people to  
15 work, small business, like myself, and now we are  
16 in a spot where I am looking at this and saying,

17 "I've got to do something different now that I have  
18 spent a lot of time, money and effort in the last  
19 three years to get to this position and really in  
20 the last three or four months it fell apart."

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

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

25 PRESIDENT SOLOMON: Secondly, if you want

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1 to speak, at least since we have tried to be  
2 respectful you can be respectful. If you want to  
3 insult the Commissioners --

4 MR. DZURINA: I am not insulting anyone.

5 PRESIDENT SOLOMON: Let me finish.

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

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

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

19 what do I see has happened: An Energy  
20 Master Plan that has changed dramatically.

21 PRESIDENT SOLOMON: why do you think it  
22 happened overnight?

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

25 PRESIDENT SOLOMON: Have you considered

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1 speaking to any people in the SREC market fo find  
2 out why it happened?

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

9 PRESIDENT SOLOMON: why did they tell you  
10 that the bottom dropped out of the market?

11 MR. DZURINA: Go look at a brokerage.

12 PRESIDENT SOLOMON: I'm asking you.

13 MR. DZURINA: My inclindation is because  
14 there is a change in the Master Plan.

15 PRESIDENT SOLOMON: I know why.

16 MR. DZURINA: You tell me, you know.

17 PRESIDENT SOLOMON: I'm going to tell you.

18 The reason is that the program was very  
19 successful and in the last six months or so, maybe a  
20 year, since the Master Plan has been discussed and  
21 all those rumors are out there which are a lot worse  
22 than what's written in the Master Plan, there was a  
23 tremendous volume of solar being built so that the  
24 supply of SRECs instead of being short is projected  
25 to be long by next year.



1 MR. DZURINA: Does that have something to  
2 do with our thirty percent change?

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

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

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

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

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

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

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

1 MR. DZURINA: I can tell you from my own  
2 basis that in the last three months I haven't been

3 able to get a project under contract. I can tell  
4 you that I taught solar and renewable energy classes  
5 since October 2009 and i have never once had three  
6 months of classes not run due to lack of enrollment  
7 until now. What is that from?

8 What is that from?

9 PRESIDENT SOLOMON: I just told you.

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

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

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

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

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

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

6 We can have this debate, we can do it  
7 later, but I can tell you that we have had a couple

8 of positive suggestions.

9 MR. DZURINA: I'm sure you have.

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

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

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

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

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1 four months.

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

4 MR. DZURINA: Yes, tell me.

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

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

9 PRESIDENT SOLOMON: Okay, it's your  
10 opinion.

11 MR. DZURINA: No, it's not-- you're right,

12 it is my opinion.

13 PRESIDENT SOLOMON: We hear you.

14 MR. DZURINA: I do, too.

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

17 MR. DZURINA: Thank you for nothing.

18 PRESIDENT SOLOMON: Edith Gruber.

19 MS. GRUBER: Good afternoon.

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

22 For us the prospect of new nuclear plants  
23 is a nightmare. During the time that we have been  
24 organized in 2000, twenty municipalities have passed  
25 resolutions opposing the extension of the license of

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1 Oyster Creek. We believe that due to public  
2 pressure and private citizens it helped to reduce  
3 the extension from twenty years to ten years.

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

13 In addition to that, we have nuclear  
14 waste that is piling up in our backyards. I live  
15 ten miles from Oyster Creek, there have been  
16 accidents of meltdowns. In addition to the safety

17 issues and the way that citizens feel, there is the  
18 issue of economics, a practical issue. The new  
19 nuclear plants are not practicable, it is expensive.

20 I would like to refer you to a 126 page  
21 document by the Union of Concerned Scientists.

22 They said that nuclear power plants are  
23 not economically viable, they depend on subsidies in  
24 order to exist, they keep taking.

25 when nuclear plants started out there was

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1 an attempt made to try to give it some  
2 sustainability, and what happened is that according  
3 to the report the nuclear power industry keeps  
4 demanding more and more money. I would like to see  
5 you study that report. The report says there are all  
6 kinds of ways that the nuclear industry demands  
7 more money through loan guarantees, outright grants  
8 and tax reductions.

9 Now I want to get to the practical  
10 aspect. Since Three-Mile Island nuclear plants have  
11 not been built in our country, they have been built  
12 in Europe and other places. Where are we going to  
13 get the help to build the new nuclear plants? That's  
14 a problem.

15 In addition to that, 92 percent of uranium  
16 is imported so we should consider that also.

17 I would like to see the Master Energy Plan  
18 kept the way that it is now, no changes.

19 PRESIDENT SOLOMON: Can I ask you a  
20 question, because it does, it specifically cites the

21 2008 Energy Master Plan with respect to the Global  
22 Warming Response Act, the carbon targets, and it  
23 essentially cites the 2008 Energy Master Plan, and  
24 there is a section, 713, Nuclear Generation to  
25 Satisfy the Global Warming Response Act, it doesn't

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1 say that we need to build more nuclear, it simply  
2 refers to the prior Energy Master Plan and that in  
3 order to meet those carbon targets it may be  
4 necessary, but there are a lot of if's about it  
5 including the financial issue, it doesn't advocate

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

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

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

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

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

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

1 fact.

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

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

10 Thank you very much.

11 PRESIDENT SOLOMON: Thank you.

12 Janet Tauro.

13 MS. TAURO: My name is Janet Tauro.

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

18 I would like to very much support the  
19 comments made by Christine Guhl of the Sierra  
20 Club, terrific observations, which is actually  
21 something that I was noticing during the course of  
22 these hearings in Jersey City, Trenton; it's  
23 amazaing how just ordinary citizens are coming out,  
24 coming out about the Plan, not employed anywhere,  
25 but they keep coming out to express what they hope

1 will be the vision for the future.

2 I think it is so much prompted by their

3 concerns for their children, their concerns for  
4 their grandchildren and the environment that we are  
5 going to leave them.

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

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

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

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

21 It is very disturbing to hear support  
22 today given to nuclear; that should not even be  
23 considered, that should not be an option after  
24 seeing what we saw in Fukushima and what is going  
25 on there today. You know, it has gotten off the

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1 front pages, but there are tons and tons of  
2 radioactive water flowing into the Pacific, radio-  
3 activity has entered into the food chain, milk,  
4 cows are eating radioactive grass, there are  
5 thousands of people who will not be able to return  
6 to their homes not just because of the Tsunami but  
7 because their home towns are radioactive.



8                   And reports were issued a couple of weeks  
9 ago about the tests of the urine of children living  
10 eighteen miles from the site, and their urine was  
11 radioactive.

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

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

24                   As a matter of fact, in Japan, what is  
25 interesting is that of their fifty-four reactors,

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1 sixteen are operating, and they are meeting their  
2 baseload and they are meeting their energy needs  
3 through intense conservation efforts and their  
4 windmills, and they are even considering taking,  
5 getting rid of the nuclear program completely as are  
6 Germany, Italy, Switzerland, we are seeing France  
7 move away from it and we are seeing an explosion of  
8 wind and solar technology in China.

9                   So I would just urge you and really just  
10 beg that you can find it in yourselves to push for  
11 clean energy technology. That is what the people in

12 New Jersey really need. If the other countries can  
13 do it, we can do it, too.

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

17 Thank you very much.

18 PRESIDENT SOLOMON: Thank you.

19 Kate Hubschmitt.

20 MS. HUBSCHMITT: My name is Kate  
21 Hubshmitt.

22 My name is Kate Hubschmitt and I work for  
23 the New Jersey Carpenter Contractor Trust or NJCCT.

24 NJCCT is the labor management cooperative  
25 of the carpenters union and their signatory

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

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

12 Construction unemployment rates are down from 17.3  
13 percent in July 2010 to 13.6 percent in July 2011.  
14 This sharp drop indicates that many construction  
15 workers have either left the industry to find work  
16 elsewhere or have reached the maximum allowance of

17 unemployment benefits, leaving them in severe  
18 financial hardship and affecting thousands of New  
19 Jersey's working families. The lack of industry  
20 demand indicates the need for innovative  
21 investments, and we believe the development of New  
22 Jersey's clean energy industry will provide many of  
23 the opportunities needed to supply jobs for years to  
24 come.

25 Globally, the clean energy industry is a

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1 2.3 trillion dollar market. As a direct result of  
2 these investments, the industry is expected to grow  
3 20.4 million new jobs by 2030. Naturally, New  
4 Jersey has been a front-runner in clean economy  
5 market investments, spurring new industry job  
6 growth. According to a 2011 report by the  
7 Metropolitan Policy Program of the Brookings  
8 Institution, between 2003 and 2010 clean energy  
9 investments led to the growth of 152,034 green jobs  
10 throughout the New York-New Jersey metropolitan  
11 region. No other major metropolitan region in the  
12 country has yet to break the hundred thousand mark,  
13 including California's Los Angeles-Long Beach-Santa  
14 Anna hub, which grew 89,592 clean economy jobs  
15 during the same period. In 2010 the State of New  
16 Jersey alone had 94,241 jobs in the industry and  
17 2.4 percent of all State jobs. Furthermore, the  
18 annual average annual increase in the number of  
19 clean economy jobs grew 4.7 percent faster than  
20 almost any other emerging industry.

21                   These figures alone support the economic  
22                   viability of this growing industry. For this  
23                   reason, the Carpenters have remained steadfast in  
24                   transitioning much of our advanced training programs  
25                   to focus more heavily on sustainable building,

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1                   including the construction of new forms of energy  
2                   generation, including wind and solar.

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

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

24                  Investment in clean energy infrastructure  
25                  lays out a long-term plan for job growth and removes

1 thousands of construction workers from the  
2 long-term unemployment that is stunting New Jersey's  
3 economic growth. The Carpenters Union and their  
4 employees are committed to ensuring that New Jersey  
5 remains competitive for years to come.

6 PRESIDENT SOLOMON: Thank you.

7 Justin Murphy.

8 A GENTLEMAN: He left.

9 PRESIDENT SOLOMON: Ethan Sprague.

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

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

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

20 The SunRun Company started in 2007 in  
21 California. The model is and was to create  
22 residential solar and make it easier for solar  
23 installation. The model has quickly taken off and in  
24 2009 we came to New Jersey. We had about twenty  
25 five hundred customers under contract in New Jersey

1 and we buy solar panels locally, so we reinvest it  
2 into New Jersey to purchase systems that go into

3 customers' homes and then they pay for the energy.  
4 This avoids the up-front cost that would be a  
5 barrier to going forward.

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

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

11 MR. SPRAGUE: Exactly, yes. .

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

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

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

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

25 That gets me to the Energy Plan.

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

5 In the Energy Master Plan it also talks  
6 about not picking winners and losers, and as we are  
7 looking at this vision I think it gets more viable

8 if the data in the analysis that underlies the  
9 vision is supported.

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

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

23 The second point I would like to point out  
24 is on figure 41 on page 93 gives the cost in cents  
25 per kilowatt hour, if you look at it, it's about

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1 thirty-five cents per kilowatt hour. This is based  
2 on a 2 kilowatt system. The average system size for  
3 residential in New Jersey is a much smaller system,  
4 so I think this will skew the numbers, we are  
5 showing a much different cost per kilowatt hour.

6 PRESIDENT SOLOMON: What number are you  
7 showing?

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

12 would be happy to provide something on that.

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

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

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

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

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1 be updated.

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

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

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

9 PRESIDENT SOLOMON: No, I'm saying your  
10 2011 projection.

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

15 PRESIDENT SOLOMON: I have got it.

16 MR. SPRAGUE: I think it is also pertinent  
Page 112



17 to know in the report that says, " The employment  
18 benefits from installing and maintaining solar  
19 slightly outweighs the economic benefits of higher  
20 electricity prices, " on page 103 of the Spiegel  
21 report..

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

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

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

16 That gets me to a couple of points. If you  
17 look at the different energy resources, and in  
18 particular, the first one is a broader economic  
19 benefit from residential solar. The report cites in  
20 a couple of places that residential is higher. The

21 reason it is higher is because of the local jobs,  
22 and as costs go down what remains is the local jobs  
23 piece, so the investment that we are making, that  
24 hundred million dollar investment system has also  
25 been creating local jobs.

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

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

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

24 The last thing is energy awareness.  
25 when I look at the energy market, demand response is

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

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

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

1 per system you gain in the marketplace.

2 So to the extent that you can work on

3 those per system costs I would really appreciate it  
4 and I think the State would appreciate it.

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

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

15 PRESIDENT SOLOMON: The taxes. are high.

16 MR. SPRAGUE: The taxes are different..

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

25 Basically what we are doing is taking a

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1 higher price for a shorter term contract because we  
2 don't think we are going to get anything or as much  
3 at the end, so we are sort of forced into taking  
4 whatever we can now because of the uncertainty of  
5 the future. If there was a structured SREC market  
6 where a lower price was available for a longer term  
7 we would be all over that and it would help

8 facilitate our efforts, and the sooner that can be  
9 done the better, I think the last solicitation is in  
10 September.

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

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

24 But when you read the Master Plan, we read  
25 it, we read it fifteen or twenty times each or maybe

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1 thirty, we weren't looking for a conclusion, just  
2 information, in other words, what the cost is, and  
3 then decisions about what is to be done with that  
4 information would be made by the policy-makers,  
5 typically the Legislators and the Governor.

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

10 And my question is, do you aggregate, is  
11 part of your model to aggregate the energy sold back

12 to residential buyers, or do you do it one resident  
13 at a time?

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

16 PRESIDENT SOLOMON: Is aggregation an  
17 option?

18 MR. SPRAGUE: is it an option? I'm not  
19 sure in what context you are asking, the SREC  
20 finance programs, it requires a single obligation  
21 for every project.

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

25 MR. SPRAGUE: Yes. The one point I would

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1 like to make is in regard to providing access to  
2 people, what is happening now is that it it  
3 becoming harder to try to finance these projects and  
4 make it accessible to people and we would be happy  
5 to give you our ideas on that.

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

10 Earl Benner.

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

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

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

25 PRESIDENT SOLOMON: I'm listening.

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

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

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

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

18 "One of the things"--this is the Governor  
19 speaking, " one of the things that I am announcing  
20 today is that there will be no new coal permitted in

21 New Jersey. From this day forward any claim that  
22 anyone has regarding any type of coal based  
23 generation of energy in New Jersey is over. We know  
24 that coal is a major source of CO2 emission, we  
25 will no longer accept coal as a new source of power

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1 in this State. "

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

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

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

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

25 In the fiscal year 2010 the U.S.  
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1 Department of Energy instituted the Offshore wind  
2 Innovation and Demonstration Initiative. They came  
3 up with a number, a goal and expectation that  
4 off-shore wind in the United States achieve 54  
5 gigawatts at a cost of seven cents per kilowatt hour  
6 by the year 2030 with an interim scenario of 10  
7 gigawatts at ten cents per kilowatt hour by 2020.

8 Now, those numbers are right around our  
9 current costs of burning coal, so we should be doing  
10 everything we can to see to it that those goals are  
11 achieved, and we think the best way to do that is to  
12 set your goals high, not low.

13 The concept of the BPU putting out a  
14 Master Plan that lowers our goal to 22 and-a-half  
15 percent is setting the wrong example.

16 So I wish you would reconsider that and  
17 perhaps make a change to that, and I think you will  
18 find that those are the thoughts that the Governor  
19 has on those issues, too.

20 COMMISSIONER FOX: Charles Anvrade.

21 MR. ANVRADE: I am retired.

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

25 MR. ANVRADE: Yes.

1 Good afternoon, everyone, and thank you  
2 for the opportunity to be here and thank you for

3 holding these meetings, which implies that there is  
4 going to be a revision in the Energy Master Plan.

5 I want to refer to the same study that  
6 Earl just told me about before the meeting started  
7 about the Harvard Medical School.

8 Now, when I looked at the 230-some odd  
9 pages of the report, actually I concentrated on the  
10 graphics more so than on any narrative, but looking  
11 at the charts, it's pretty obvious that the  
12 concentration on this study was to get the 30  
13 percent down to 22 percent of greenhouse gas  
14 reduction. and so that was the objective and,  
15 therefore, the alternative energy is not shown very  
16 prominently on that chart as is the methane gas and  
17 the nuclear.

18 Speakers before me have already discussed  
19 the health issues, particularly the radioactive  
20 substances and nuclear reactions and the other  
21 health issues that are discussed in the Harvard  
22 study that should be addressed in this revision that  
23 we hope to see.

24 I would want to concentrate specifically  
25 on the health issues.

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1 There are two questions that I have for  
2 the BPU to consider. The first one is on the health  
3 care cost to reduce clean air and clean water under  
4 your 22 percent and-a-half percent reduction  
5 compared to the prior plan of 30 percent. I didn't  
6 see that anywhere, so that what I am asking and  
7 hoping is that it will be considered in your next

8 plan.

9 The second question has to do with the  
10 fossil fuel industry's profit gain at the 22  
11 and-a-half percent level against the health care  
12 losses at that level, which makes more sense for the  
13 economic health of all citizens in the State of New  
14 Jersey. ,.

15 So it would be great to see the health  
16 care cost benefits and cost on such graphics you  
17 have to show.

18 And I thank you very much.

19 PRESIDENT SOLOMON: Thank you.

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

24 Matthew Hoke.

25 MR. HOKE: I am basically just expressing

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1 dissatisfaction with reducing the clean energy goal  
2 from 30 percent to 22 and-a-half percent. I would  
3 like to keep it where it is or higher.

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

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

10 PRESIDENT SOLOMON: Certainly cost was a  
11 factor, but since the statute, the Solar Advancement

12 Act, if you look at it in the aggregate, it sets or  
13 confirms that 22.5 percent standard. We felt,  
14 number 1, it's a floor, not a ceiling, and that that  
15 floor was set and acknowledged in the past by the  
16 Legislature, that that was a policy that the  
17 Legislature could change if they wanted it changed,  
18 but there was nothing about that floor that changed  
19 or altered our ability to go higher or past it, if  
20 it was doable.

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

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

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

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

14 I'm certain that there will be people  
15 that want to provide information, which is really  
16 what we are hoping to get, not just raise it because

17 we think it should be raised and we want to have  
18 that aspiration, but that your target should be  
19 22.5, 25, 30, and here is how we think we will get  
20 there and here is what it is based on and here is  
21 what the real environmental impact is, that type of  
22 analysis is what are hoping to get.

23 what we have got mostly is just a request  
24 that we set a higher standard without the rationale  
25 as to what is the reason for it, what is our

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1 authority to do it, and what is the net environment  
2 and economic impact.

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

7 PRESIDENT SOLOMON: Petition away.

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

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

20 So if you are looking for a suggestion,

21 I'd like to see this on a Federal level.

22 PRESIDENT SOLOMON: Good luck.

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

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1 I don't think there is such a thing as the  
2 overbuilding of solar until we get to a hundred  
3 percent zero fossil fuel energy grid.

4 I look around these days and I see  
5 technologies that make me feel like I am living in  
6 science fiction, I see people walking around with  
7 little computers in their hands like from Star-Trek,  
8 and so I think that whatever we set our minds to we  
9 can do. We have a lot of unemployed people, we have  
10 a climate change problem that will only get worse  
11 the longer we ignore it, and we have a bunch of  
12 investors who rather than putting down money and  
13 creating jobs are skittish and are not investing  
14 that money and creating those jobs.

15 So with the Nike method, you just do it.

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

24 PRESIDENT SOLOMON: I'm going to give  
25 you the Treasurer's cellphone number and suggest

1 that you give him a call.

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

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

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

19 Finally, this is more of a local issue, I  
20 would just bring this up here, the town I work in,  
21 Ocean City, we recently did some tests on people's  
22 magnesium levels--no, mercury levels, and they were  
23 pretty high. I suspect that it is because of the  
24 coal (inaudible), I don't have any hard and fast  
25 data with me, I can probably get it to you later,

1 but I suspect that's contributing to asthma and  
2 maybe some heart and lung disease in my area. They

3 have been given waiver after waiver after waiver.

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

7 PRESIDENT SOLOMON: Thank you.

8 Angela Jones.

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

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

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

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

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

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

5 MS. JONES: That's all I have to say.

6 PRESIDENT SOLOMON: I shouldn't say Cogen  
7 because that implies a bias against a company, but



8 the proposal they apparently had on the books was  
9 for a carbon sequestration facility up in Linden;  
10 that's gone, that's off the table.

11 MS. JONES: thank you.

12 PRESIDENT SOLOMON: Fred Hauber.

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

17 I am here representing Eastern Energy. I  
18 am also the President of the International  
19 Association of Lighting Management Companies and the  
20 Chair of the IES Energy Management Committee and the  
21 Association of Energy Engineers Renewable Energy  
22 Committee.

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

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

11 I am going to limit my comments because a

12 lot of what I have, including the numbers, have  
13 already been said and I'm not going to say it again  
14 so under a separate cover I will send that to you.

15 PRESIDENT SOLOMON: Please.

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

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1 I am going to recommend changes in the  
2 direct install program which may help them go  
3 forward. I have already been involved in  
4 discussions with PRC and they are right on the ball.

5 And in teaching renewable energy for the  
6 Association of Energy Engineers, we look at all of  
7 the different types of renewables energies, and  
8 there are not many true renewables.

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

13 Tidal is somewhat there. The problem with  
14 tidal is you have to be careful with the rise and  
15 fall, the volume of flow and the redistribution of  
16 subsurface materials that may cause a slowdown.

17                   wind, that's another good one, I am glad  
18 to see that we are promoting off-shore wind. Right  
19 now the State of New Jersey itself only has 5  
20 percent of its land mass that is applicable to  
21 solar, and so off-shore wind is a great thing to  
22 promote, and we thank you for that.

23                   And then we come to good old solar.  
24 Everybody talks about solar. We actually have  
25 invested some of our own funds in funding solar

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1 projects. There are certain products that we cannot  
2 offer right now just because, I will call it, a  
3 steep depression in the SREC market.

4                   And we all knew that this was going to  
5 decline but nobody expected it to go to where it is  
6 so fast. I think you need to bolster that in some  
7 way. I don't know whether that is something that  
8 the Board can take on or whether that has to go  
9 through legislation and then come to the Board.  
10 Maybe you can give us some insight on that.

11                   PRESIDENT SOLOMON: Certainly we have to  
12 set, and we will be setting to create stability  
13 within a month or two to the new SACP schedules past  
14 2016, and that will create some stability. There  
15 have been a number of suggestions, some here today  
16 and some in the past which includes setting up a  
17 floor, what that floor might be, a tiered floor so  
18 there would be some stability as to SREC prices and  
19 enable some long-term financing and, some other  
20 ideas that would create guaranteed bankability for

21 SRECs. We are listening to all that.

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

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1 probably require legislative action.

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

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

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

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

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

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

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

19 So there are people out there filling out  
20 the SRP registrations for whatever reason they  
21 don't know.

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

1 MR. HAUBER: Right, and what we'd like to  
2 do is we would like to see them come back with

3 making people produce a contract if they are going  
4 to file a registration form. If they can't produce  
5 that contract, that contract is not real, it's pie  
6 in the sky.

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

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

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

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

25 By the way we did the solar here at

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1 Stockton and all the new lighting sequences in the  
2 gymnasium.

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

5 MR. HAUBER: I didn't do that.

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

8 PRESIDENT SOLOMON: Thank you.  
9 Robert Toreki.

10 MR.TOREKI: I am Robert Toreki.

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

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

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

24 Before I get to the remarks that I want to  
25 make, I did want to respond to the earlier comment

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1 we had from these gentlemen from industry, I'm  
2 sorry, I didn't catch their names, where they came  
3 before you and they pleaded that the Societal  
4 Benefits Charges were killing them.

5 I am going to ask you to put no weight to  
6 that for the following reasons: 50 percent of the  
7 electricity in the Unites States is generated from  
8 coal power. Coal power, you have got the cave-ins,  
9 the amputations, the electricutions that occur in  
10 the mines, you have the black lung, which is the  
11 government paying the miners saying, "You are going

12 to live a couple of less years, here is some money."

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

18 The US EPA says that coal plants kill  
19 17,000 people each year on top of all the asthma and  
20 all the other things that come with that.

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

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

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

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

9 i don't think that he said he shouldn't  
10 pay, I think what he said was, not reduce it,  
11 there is a way to do it and charge you on SBC that  
12 will incentivise demand reduction, energy efficiency  
13 and won't penalize companies that have done it  
14 already and have maxed out, and the way to do that  
15 is not to do it on a flat scale of total number of  
16 kilowatt hours but give you more credit or a higher



17 charge for peak.

18 MR. TOREKI: I have no problem with net  
19 metering.

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

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

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

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

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

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

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

20 MR. TOREKI: That's fine.

21 I just want to give you a few points about  
22 residential solar because it is my understanding  
23 that there is an effort to try to de-emphasize  
24 residential solar installation.

25 On a dollar for dollar basis, because it

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1 is smaller than on a watt for watt bases,  
2 residential solar costs more, that's absolutely  
3 true.

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

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

20 That is sixty thousand dollars I brought  
21 into the State of New Jersey for economic activity.  
22 When somebody like me does that, I am going to get  
23 my electric savings each month, I will get my four  
24 hundred SRECs every month, and I am not going to  
25 take that money and put it back into the stock

1 market where it came from, I will spend that money  
2 on other stuff, I am going to spend it in New  
3 Jersey.

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

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

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

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

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

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

3 use.

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

12 In fact the hundred percent limit  
13 penalizes people like myself.

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

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

25 In other words, there would be a lot of

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1 projects on houses that weren't built yet or may  
2 never be built, but we go to the point you are  
3 talking about. We get it and we are actually  
4 working on it.

5 MR. TOREKI: One last comment about natural  
6 gas. When you look at it, coal is pretty much down  
7 the tubes as far as any new install capability

8 there, we are working on phasing out of coal plants.

9 I have no problem with nuclear power, I am  
10 a realist and I don't think, especially in the wake  
11 of Fukushima thanks to one guy who didn't think very  
12 well to use generators or back-up generators,  
13 basically set nuclear power back twenty years, if  
14 not forever.

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

21 And the problem with natural gas is all of  
22 it is coming out of the Marcellus shale and the  
23 shale plate, but what happens when the first  
24 aquifer gets contaminated or there is the first big  
25 industrial accident, we are going to have a public

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1 backlash and if all of our marbles are in that  
2 natural gas basket we're in trouble.

3 Look at Pacino (phonetic) Chesapeake  
4 (inaudible) are all looking at developing, as they  
5 should, natural gas for transportation fuel. If  
6 that catches on, demand and supply of natural gas  
7 may reestablish their relationship and natural gas  
8 prices may rise, and we may be kicking ourselves  
9 down the road that our plan hasn't taken into  
10 account the possibility the competition in the  
11 natural gas market.

12 PRESIDENT SOLOMON: Thank you.

13 John Cusack.

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

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

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

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

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

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

14 One of the major activities, by the way,  
15 of NJ CAT is their piece of technology, and I think  
16 that's extremely important. A lot of people out

17 there are saying, this is a great technology, we  
18 should invest in it and there are a lot of things  
19 out there inaudible). We have to be careful of those  
20 and work on them.

21 I have some very personal comments  
22 relating to a friend of mine, Stu Hart, who some of  
23 you may know is the S.G. Johnson Professor of  
24 sustainability at the Cornell Business School. He  
25 has been quoted as saying that there is a great

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1 falacy out there that renewals and energy  
2 efficiencies are too expensive.

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

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

18 There is a lot of good technology sitting  
19 out there on the shelves of corporations and  
20 universities that have this technology. And the

21 reason is implementing that technology would be very  
22 disruptive to the present business models.

23 I think the example of, you may have seen  
24 it in the papers this week, Exxon after spending  
25 decades as the largest highly valued company has

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1 been supplanted by Apple Computers.

2 PRESIDENT SOLOMON: For a brief period.

3 MR. CUSACK: For a brief period.

4 To me that's amazing about the benefit of  
5 going small versus going big. Exxon has been going  
6 big for years and years and Apple was going small,  
7 small, small, and you see what happened in terms of  
8 the values, Apple went from 1.7 billion in 1997 to  
9 348 billion earlier this week.

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

18 The solution is going to be small scale  
19 renewable distributed clean technology, many of it  
20 related to energy efficiency, and we are not just  
21 going to green the State, we are going to green the  
22 health, the store, the facilities, the hospital or  
23 school one at a time, and in the long-run all of  
24 those little pieces will add up to make the case for  
25 renewables.



1           To give you a quick example, right now the  
2 average building in New Jersey is about 30 percent  
3 more inefficient than the average building in  
4 Belgium. And it's not because they are nice guys  
5 or they are getting taxed higher, it's just that  
6 they have different standards of how they affect  
7 buildings.

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

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

18           A good example, Cap Still  
19 (phonetic)Microserve certified that they could meet  
20 air pollution quality standards, and what they are  
21 doing is installing in National Guard armories  
22 cogeneration units producing heat to heat the  
23 buildings and also producing hot water for the hot  
24 water units, and actually it becomes a  
25 tri-generation plant by producing electricity as

1 well. That technology is already out there and is  
2 already being used in a lot of places.

3                   what I am suggesting are three major  
4 points to allow this breakthrough in the Energy  
5 Master Plan, marketing this technology so it could  
6 be more commercially applied within our energy  
7 infrastructure.

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

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

23                   This would include regulatory permitting  
24 and also things like business plan goals. A lot of  
25 these guys are great engineers, great scientists and

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1 know how to market technology, they need guidance  
2 and technical assistance for raising capital for  
3 product marketing and operational implementation,  
4 how do you actually do it. And that's something very  
5 important for getting this technology into the  
6 market.

7                   Demonstrating commercial scale pilot  
                    Page 146

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

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

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

25 I'd like to discuss funding, research

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

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

11 My last comment is, personally, and I am

12 speaking for NJ CAT, we would be glad to assist the  
13 BPU and the State in implementing these steps now so  
14 we would have a cleaner and more efficient energy  
15 infrastructure in this State, improved State  
16 economy, more jobs, and maintain an excellent  
17 quality of life environment for the people who live  
18 in New Jersey.

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

24 There are a lot of companies out there  
25 that are doing that. One of my clients is an asset

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1 manager who picked the eighty most successful  
2 companies in the S&P 500, one of the criteria is how  
3 energy efficient they are, and in that portfolio of  
4 the eighty companies in the S&P 500 they have beaten  
5 the S&P by 10 percent over the last ten years.

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

15 That's what I am suggesting and we will  
16 submit our written remarks to the BPU.

17 PRESIDENT SOLOMON: Thank you.

18 Donna Henry.

19 MS.HENRY: Good afternoon.

20 I am here as a resident of New Jersey.

21 In past years New Jersey has led the  
22 nation with cutting-edge policies designed to curb  
23 global warming, reduce air pollution and promote  
24 clean energy.

25 Instead of supporting the State's efforts

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1 to move as quickly as possible to clean energy,  
2 Governor Christie is slashing our clean energy goal  
3 from 30 percent to 22.5 percent.

4 We were poised to be the national leader  
5 in solar and wind, but this EMP jeopardizes that.  
6 We were meeting or exceeding our clean energy goals,  
7 but Christie is jeopardizing our safe, clean energy  
8 future.

9 Not only does this undermine our goals but  
10 the goals of our clean energy program; not only will  
11 it hurt the environment but the economy and jobs as  
12 well.

13 Governor Christie said he wants to create  
14 a basket of options from which the State could draw  
15 power generation in New Jersey. The problem is  
16 what is in the basket: natural gas is obtained by  
17 fracking, it requires a potent chemical cocktail.

18 Some of these chemicals can and have ended  
19 up going to the surface and leaching drinking water  
20 and contaminating it.

21 Shale gas has a greater greenhouse gas  
22 footprint than coal or oil because of the methane  
23 that is released during the shale gas processing.  
24 Coal fired power plants, we heard what  
25 they did. Coal fired power plants produce

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1 approximately one third of our carbon dioxide.

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

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

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

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

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

23 PRESIDENT SOLOMON: Thank you.

24 Brian Bovio.

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

3 PRESIDENT SOLOMON: It has grown a little  
4 bit.

5 MR. BOVIO: I can't recognize it.

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

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

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

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

23 Thank you.

24 Larry Furman.

25 MR. FURMAN: Good afternoon, President

1 Solomon and Commissioners. Thank you for extending  
2 this opportunity to comment on the Energy Master

3 Plan.

4 It is a privilege to live in a state where  
5 opinions of private citizens are sought by the  
6 agents of this government, of the people, by the  
7 people and for the people.

8 I recently earned an MBA in Managing for  
9 sustainability, which is kind of like management for  
10 long-term.

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

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

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1 And the cost of compressing and capturing  
2 and the pumping of carbon was estimated by Roger  
3 Salon (phonetic), the Director of the Case Western  
4 School of Sustainability, to be at least twenty five  
5 percent and maybe forty percent, so if you do the  
6 math, at best it's a 562 and-a-half megawatt plant  
7 for nine billion dollars, which is sixteen dollars



8 a watt..

9 Solar, that's six dollars a watt and  
10 dropping, wind is I think two to three, so which is  
11 more economical?

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

18 I'd like to offer two observations. You  
19 are thinking very long-term, that's great. However,  
20 if we can define coal and nuclear as clean then we  
21 are already at 100 percent clean energy.

22 You know, there is a reality show that  
23 pictures a bunch of young people stumbling around  
24 the shore. We can broaden the definition of art to  
25 include that show.

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

5 A couple of things happened recently.  
6 You mentioned Fukushima in the report. On December  
7 22, 2008 a flood at a steam plant in Tennessee put  
8 about 1.2 billion gallons of toxic waste in the  
9 (inaudible) Rivers in Tennessee and that toxic soup  
10 contained arsenic, lead, mercury, uranium and zinc,  
11 toxic heavy metals from A to Z

12           The TVA estimates that the clean-up will  
13 cost about a billion dollars, which is actually  
14 okay because the TVA is booking those costs as an  
15 asset, so it is good, it adds to the GDP, but that  
16 really means that the GDP is not a good metric.

17           In the spring and summer of last year,  
18 beginning April 20th, and as you mentioned it in  
19 the report, for eighty-five days approximately sixty  
20 thousand to eighty thousand barrels a day, 5.1  
21 million barrels of crude oil, and a barrel contains  
22 forty-two gallons of stuff which can be manufactured  
23 into about forty-four gallons of stuff, that  
24 spilled into the Gulf of Mexico, and I don't know  
25 how much dispersements were poured into the Gulf,

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1 but I also don't know if that shrimp is still  
2 edible.

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

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

11           In May of this year the (inaudible) plant  
12 on the Missouri River a few miles north of Omaha,  
13 the reactor was shut down to refuel. That was really  
14 fortuitous because in June, on June 6th the Missouri  
15 River flooded so that plant is now in the middle of  
16 the Missouri River. It has been shut down, it's

17 losing a million dollars a day because the  
18 maintenance costs I imagine are higher and they  
19 are not generating electricity. According to the  
20 Director of the Nuclear Safety Project, the risk of  
21 radiation is low but the expenses are startlingly  
22 high.

23 In March of last year a young man named  
24 Sarif Mobly (phonetic) was arrested in Yemen, he is  
25 from New Jersey. I imagine that as a child he

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1 watched James Bond movies. In prison he did a  
2 James Bond like move, he complained that he was  
3 sick, he asked to be taken to the hospital, on the  
4 way to the hospital he allegedly wrestled a gun from  
5 a cop and allegedly shot two cops, one of them is  
6 dead. I don't know how much of that is true, but I  
7 do know that before he went to Yemen he worked as a  
8 day laborer at nuclear plants here in New Jersey,  
9 Pennsylvania and in Maryland, and he was given  
10 unlimited access. I have a camera on my blackberry,  
11 I could take pictures and no one would know. I have  
12 done it.

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

16 we can build them and we can destroy them.  
17 These seem like isolated incidents, but if you  
18 connect the dots, they are built into the system.  
19 That's why no new nuclear plants have been built in  
20 this country since the seventies. You can engineer

21 them to be more or less safe until they get out of  
22 hand, probability of an accident becoming very  
23 expensive is almost a certainty.

24 If you are buying lottery tickets you are  
25 either saying, yes, I love paying taxes, or you are

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1 saying this million to one shot is going to pay off.

2 Again, if you think about it, we saw  
3 Three Mile Island in '79, Chernobyl in '86,  
4 Fukushima this year, five meltdowns, one partial  
5 meltdown, so the probability of a meltdown or a  
6 partial meltdown is one every nine years. That's  
7 empirical data. We can now say with some certainty  
8 that the probability of a major disaster is and has  
9 been one in nine years.

10 we know we need energy; the question is  
11 not should we shift the paradigm, but how and how  
12 much time will it take, how many people do we need,  
13 where do we find them and how do we train them.

14 we can do it in ten years, that would be  
15 aggressive. We went in ten years from nine  
16 kilowatts at six installations, Commissioner Fox  
17 was here, to about three hundred megawatts, so going  
18 from three hundred megawatts to seven gigawatts in  
19 ten years, that might be tough, so maybe we should  
20 do it in twenty-five years.

21 Germany will be at 40 percent by 2025 and  
22 a hundred percent by the mid '60s. Where there is  
23 no fuel there is no way. Rather than consume  
24 resources we can and should harness processes.

25 Thank you.

1 PRESIDENT SOLOMON: Thank you.

2 Captain Joel Fogel.

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

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

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

20 But there have been some problems along  
21 the way. New Jersey in my opinion is a leader in  
22 the United States in many ways and stepping in the  
23 right direction at the right time, from water  
24 quality analysis where we came up with various Acts,  
25 the Water Pollution Control Act that helped not just

1 our state but our nation focus on situations like  
2 water pollution in our rivers and in our lakes, it

3 goes back a long time.

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

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

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

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

24 My wife has had lung cancer and I have  
25 Crone's, so I have to think that there is some

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1 impact here, exactly how and what-- but here is my  
2 point: I am here to encourage you people, you  
3 Commissioners; you have a tremendous responsibility.  
4 Thank you for taking this responsibility, but I  
5 want to encourage you to keep going in the right  
6 direction.

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

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

22 PRESIDENT SOLOMON: Ladies and Gentelmen,  
23 that concludes our third and final Master Plan  
24 public hearing. We will have a continuation of the  
25 Trenton hearing so you probably won't be hearing

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1 anything from us until we have had a chance to  
2 review the finish of the last set here, review the  
3 transcripts, review the attachments, review the  
4 written submissions and updates on the numbers and  
5 research.

6 Thank you all for coming.

7 (Adjourned.)

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C E R T I F I C A T E

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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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WILLIAM SOKOL  
Certified Shorthand Reporter  
and Notary Public

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