1 STATE OF NEW JERSEY 2 BOARD OF PUBLIC UTILITIES 3 IN THE MATTER OF THE 2011 DRAFT ENERGY MASTER 4 TRANSCRIPT 5 0F 6 PUBLIC HEARING : PROCEEDINGS 7 -----X 8 9 STATE HOUSE ANNEX 125 West State Street Trenton, New Jersey 10 11 AUGUST 24, 2011 1:25 P.M. 12 13 14 COMMISSIONERS PRESENT: 15 LEE SOLOMON, President 16 JOSEPH FIORDALISO COMMISSIONER JEANNE FOX COMMISSIONER 17 NICHOLAS ASSELTA COMMISSIONER RHEA BREKKE, Chief of Staff 18 19 20 21 22 \_\_\_\_\_ J.H. BUEHRER & ASSOCIATES Certified Shorthand Reporters 2295 Big Enough Way 23 24 Toms River, New Jersey 08755 (732) 557-4755 25 2 1 INDEX 2 3 SPEAKERS FROM THE PUBLIC PAGE

1

	082411_Transcripts	_
4	MARTIN KUSHLER	5
5	SALLY JANE GELLERT	27
6	STEPHEN MORGAN	31
7	BRUCE BURCAT	41
8	CHRIS TOMASINI	51
9	KATE SANFORD	54
10	CHRIS STRUM	64
11	NICKY SHEATS	71
12	STEPHANIE NELSON	85
13	DAVID SIMS	89
14	DAVID PRINGLE	95
15	CATHY SIMS	112
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

3

1	THE PRESIDENT: Good afternoon. I
2	apologize for being late and I thank you,
3	Commissioners. Great minds think alike.
4	Commissioner Fiordaliso, Commissioner Fox,
5	Commissioner Asselta, staff, sorry I'm late, but I
6	don't move as quickly as I used to. Thank you all

082411\_Transcripts Remember that there's a sign-up in the 7 for comina. 8 back. So if you have not signed up to speak, make 9 sure you sign up so we can identify you. When you 10 are called to speak, please take your time and speak 11 slowly. Everything that you're saying is being 12 taken down by a court reporter and she cannot take 13 down what you're saying if you speak too guickly or 14 you will completely exhaust you and her. She won't 15 take anything down. So take your time, speak slowly, make sure you identify yourself and any 16 17 group that you are representing. Please spell your 18 name after you say it so that the court reporter can 19 get it.

This is a continuation of our August 3rd Energy Master Plan Public Hearing that we had right in this building right around downstairs, I guess in this building and a number of you had signed up at the prior meeting or the prior date, but did not get an opportunity to speak. I'll ask

#### J.H. BUEHRER & ASSOCIATES (732) 557-4755

4

you to keep it brief, although it's not a large 1 2 crowd yet. So we may be a little more liberal with time. However, please try not to simply repeat 3 4 what's been said before. If you have something new 5 please let us know. If you have written comments 6 present them to the court reporter so that they 7 could be on record and you can all review them and try to summarize them rather than simply read them, 8 9 because we will be reading all the written comments

082411\_Transcripts as well as the two transcripts before we come to any 10 11 decisions about any modifying of the Master Plan. 12 Even though keep in mind this is a draft plan and 13 the reason for these meetings is to get public input 14 that may assist us in amending or modifying. We are particularly interested in things that you feel are 15 16 inaccuracies and is a substantive explanation as to 17 why you think there is an inaccuracy, what you think the correct data or information should be, so that 18 we have some basis to decide whether we were right, 19 20 we were wrong or whether we simply misremembered or 21 misstated.

So, first is Martin Kushler. Mr.
Kushler, come on up. Good afternoon, Mr. Kushler.
I apologize for being late, but please spell your
name and take your time.

#### J.H. BUEHRER & ASSOCIATES (732) 557-4755

5

1 MR. KUSHLER: Thank you, Mr. 2 President, Members of the Board. Very pleased to be 3 able to speak with you today on this important 4 subject. My name is Martin Kushler, K-u-s-h-l-e-r. 5 I am a senior fellow with the American Council For 6 Energy Efficient Economy or ACEEE. I think all of 7 you should have before you a copy of set of our point slides that I will be talking about here 8 9 today. The second of those slides on the first page 10 provides a little bit of information on my background. The only item that I'll mention is the 11 12 third bullet point. It may be useful for you to

082411\_Transcripts know that I spent ten years on staff at the Michigan 13 14 Public Service Commission as the Supervisor of 15 Evaluation. So I have a pretty good background and 16 experience in utility. 17 THE PRESIDENT: Do you know Commissioner White? 18 MR. KUSHLER: Yes, certainly. I 19 20 worked with Greg for many years. 21 THE PRESIDENT: Great guy. 22 MR. KUSHLER: I agree. 23 THE PRESIDENT: Very capable person 24 as well. 25 MR. KUSHLER: I agree. I'll tell J.H. BUEHRER & ASSOCIATES (732) 557-4755 6 1 him you said so. 2 THE PRESIDENT: Please. 3 MR. KUSHLER: The title of my 4 presentation is "Save Energy Efficiency as a utility 5 system resource in New Jersey," and I use the term 6 save intentionally because I am concerned from 7 reading the Draft Plan that you may be at risk of 8 losing energy efficiency as a resource in New 9 Jersey, which I will explain in my remarks. 10 If you could turn to slide three on the second page, I'd like to start by noting some of 11 12 the key components of the New Jersey 2011 Draft 13 Energy Master Plan, which I found very positive and I think important for our discussion today. 14 15 Quoting from the plan on page one, the Christie

082411\_Transcripts Administration's strategic vision, "The 16 17 Administration will manage energy in a manner which: saves money, stimulates the economy, creates jobs, 18 19 protects the environment and mitigates long-term 20 cumulative impacts." I don't think many in this room would argue that no other energy resource 21 22 serves those objectives as well as energy 23 efficiency. Similarly, on the fourth slide again 24

25 from page one of the Plan, five overarching goals

#### J.H. BUEHRER & ASSOCIATES (732) 557-4755

7

are listed. First drive down the cost of energy for 1 2 all customers. I would emphasize energy efficiency 3 is the lowest cost energy resource by far, typically 4 coming in about one-third the cost of new supply and 5 later I'll show you some data on that. Second is to 6 promote a diverse portfolio of new clean in-state 7 generation. I think it's important to keep in mind 8 that energy efficiency is, in fact, the cleanest 9 resource. The cleanest kilowatts hours is one you 10 never have to generate and it is one hundred percent 11 in state. I understand that New Jersey imports 12 something like 30 percent of electricity, obviously 13 a major dollar drain there. I believe that's one reason people are talking about in summation it's 14 15 mentioned in the Plan constructing natural gas in 16 the state, but I also understand that New Jersey imports 100 percent of the natural gas that it 17 18 burns. So simply building gas fire generation in

082411\_Transcripts 19 state doesn't entirely solve the energy import 20 concern for the state, and I will emphasize in 21 contrast all of the energy efficiency resources 22 buying, if you will, from the homes and businesses 23 and public buildings within the state. So 100 24 percent domestic resource within the state, if you 25 will.

#### J.H. BUEHRER & ASSOCIATES (732) 557-4755

And finally, from the Plan on slide 1 2 five some key quotes from that Draft Plan. Page 104 3 "The most cost effective way to reduce energy costs 4 is to use less." 5 Okay. Page 106 "The best way to 6 lower individual energy bills and collective energy 7 rates is to use less energy." And "energy 8 efficiency measures implemented under the CEP Energy 9 Efficiency Program between 2003 and 2010 saved 10 approximately \$4.29 for every dollar invested in the 11 C & I sectors, and \$1.80 for every dollar invested in the residential sector." 12 So slide six, I think we can all 13 14 stipulate that the New Jersey 2011 Draft Energy 15 Master Plan, one, recognizes that energy efficiency 16 should be a high priority for the state. Two, has key goals that would be directly served by energy 17 18 efficiency, and three, acknowledges that the current 19 CEP Energy Efficiency Program has been very cost effective. 20 21 Slide seven, but here's the problem.

8

082411\_Transcripts The practical effect of the proposal in the 2011 22 23 Draft Energy Master Plan to end the current SBC supported portfolio of energy efficiency programs 24 25 and transition to some type of a self-sustaining

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

9

1 revolving loan fund structure, the practical effect 2 of that will be to decimate energy efficiency 3 production in New Jersey. 4 The evidence in conclusion is pretty 5 clear. The track record of state energy efficiency loan funds has been dismal. None of the top 25 6 states in ACEEE's Energy Efficiency 'State 7 8 Scorecard' relies entirely or even in substantial 9 part on a loan program. Energy efficiency loan 10 programs are universally plagued with very low 11 participation. My organization is just about to 12 release a white paper with our latest national 13 review of loan programs. That is one of our key 14 conclusions. Slide nine, what I'd like to show 15 16 you some specific examples from states. 17 Side-to-side comparison, if you will, of loan 18 program approach for efficiency versus utility 19 energy efficiency as a resource approach. First is Ohio. When Ohio passed their structure legislation 20 21 in '99 they wanted to use a revolving loan fund as 22 their central policy for energy efficiency. The results were dismal. They began in 2000 and seven 23 24 years worth of experience they only lent out 12

082411\_Transcripts 25 million dollars out of 80 million dollars available.

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

10

1 In 2005, they had to shift the program to grants 2 because consumers much preferred the receipt of 3 grants to taking out a loan and had no savings data 4 to report from their efforts. In contrast, Ohio, in 2009, passed an energy efficiency portfolio standard 5 6 and just two years they spent over 171 million 7 dollars on energy efficiency programs in contrast to 8 12 million dollars for loans after seven years and 9 their report over a million megawatts hours of 10 annual savings at a cost of about two cents per 11 kilowatt hour.

12 A second example is Michigan brief 13 on this, but again it's a pretty good side-to-side 14 comparison. Michigan started a revolving loan fund 15 in early 2010. They started energy efficiency portfolio standard in early 2009. One and a half 16 17 years of experience with the loan fund, two years of experience with the utility energy efficiency 18 19 programs. We have 400 loans versus tens of 20 thousands of customers that have participated in 21 utility programs, a total of 2.8 million dollars in 22 loans versus 227 million dollars in energy 23 efficiency programs, no savings data from a loan 24 program over a million megawatt hours saved from 25 utility energy efficiency programs, over two million

> J.H. BUEHRER & ASSOCIATES (732) 557-4755

1 Mcf of gas savings. 2 Finally, for an example from the 3 nearby State of New York, a very similar pattern results shown here from two different NYSERDA Loan 4 5 Programs versus NYSERDA Energy Efficiency Programs, 6 energy efficiency portfolio standard in New Jersey. 7 New York. Eight years worth of loans average about 8 900 a year versus tens of thousands of participants 9 again in utility programs, a total of 56 million 10 dollars in loans over the eight years, about seven 11 million a year. Energy efficiency programs are investing 370 million dollars in energy efficiency 12 13 per year. Energy savings 697 megawatt hours per 14 year for loans, 471,000 megawatt hours per year for 15 the energy efficiency programs. Again, a scale of 16 about, you know, 20 to 50 to 100 times as much 17 production from organized utility energy efficiency 18 portfolio standard. 19 There are many such examples, but 20 here's the essential point, a revolving loan fund is a customer service for a certain niche of customers 21 22 and certain types of measures. It is not a strategy 23 for acquiring large scale energy efficiency as a 24 utility system resource. 25 Slide 13, I just would like to spend

J.H. BUEHRER & ASSOCIATES (732) 557-4755

 a couple minutes explaining why a revolving loan
 fund has such a limited impact. To begin, there are Page 10

11

12

large segments of the energy efficiency universe 3 4 where a revolving loan fund has no applicability. 5 It really doesn't make sense for residential 6 lighting, residential appliances, residential new construction. There's already fully adequate 7 8 funding available for new construction. You don't 9 need a revolving loan fund for all types of small 10 scale commercial equipment purchases. Revolving loan fund makes no sense, similarly commercial new 11 12 construction and most industrial applications. If all you have is a revolving loan fund you are 13 14 essentially accomplishing nothing in those markets. Moreover, slide 14 for market 15 segments where a revolving loan fund might make 16 17 sense, it only addresses one of the many well known 18 barriers to energy efficiency. Those who do program 19 evaluation in the field of energy efficiency are 20 very familiar with these barriers. They include a 21 lack of awareness of energy efficiency actions in 22 general, a lack of specific information on energy 23 efficiency savings opportunities and potential 24 savings in particular homes and businesses, a lack 25 of availability of the highest efficiency options in

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

13

 the local marketplace, lack of knowledge and
 experience of key market actors, vendors,
 contractors, architects and so forth, lack of trust
 and confidence in energy efficiency measure,
 contractor performance, strong aversion to the high Page 11

6	first cost of energy efficiency regarding, rather,
7	have a loan. There's an aversion to the high cost,
8	unrealistic requirement for fast payback periods,
9	with famous landlord/tenant split incentive problem,
10	the hassle factor of having to shop for, arrange and
11	have the work done, and finally lack of access to
12	capital. Simply providing a revolving loan fund
13	only addresses the last of those ten barriers. In
14	contrast, the well-designed suite of energy
15	efficiency programs address all of those barriers.
16	They are programs designed to address each of those
17	and we have a good track record in addressing them.
18	So on slide 16, I summarize the key
19	points I'd like to emphasize. Energy efficiency is
20	a resource and the utility system should pay you to
21	acquire it, just as it expects to pay for generation
22	supplies. There is no free lunch whereby the energy
23	efficiency resource can be acquired at no cost to
24	ratepayers. Attempts by other states to acquire
25	energy efficiency through self-sustaining revolving

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

14

loan funds have clearly illustrated the inadequacy of that approach. And the SBC charge is fully justifiable because it acquires electric resources for the utility system that are far cheaper than any other sources of energy supply and sources which the system would have to procure in the absence of that energy efficiency.

> Slide 17, if we had time I could go Page 12

8

9	through an entire presentation on the economics of
10	energy efficiency as a utility system resource. I
11	would love to do that some day, but for today I'll
12	just show this one slide. I'd like to use this one
13	because it is produced not by an environmental or
14	advocacy organization. This is produced by Lazard,
15	which is the largest consulting firms to the
16	international banking industry. This is the
17	information they tell their clients about their
18	relative costs of various energy supply sources.
19	As you can see by far the cheapest source apply
20	energy efficiency about three cents per kilowatt
21	hour. What we have done at ACEEE is look at the 14
22	major states around the country and it came in at
23	2.5 cents per kilowatt hour. You can see the
24	relative cost in the gravity and energy efficiency
25	less than half to a third to a fourth the cost of

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

15

these other sources. 1

2 So, in conclusion, if New Jersey 3 wants energy efficiency to seriously contribute to 4 the laudable goals that were outlined in the 2011 5 Draft Energy Master Plan, it should maintain energy 6 efficiency as a true utility system resource and use 7 the SBC to fund a full suite of energy efficiency 8 programs. 9 If the current 20 percent by 2020 energy efficiency goal has to be modified and I 10 agree at this point that's probably a little Page 13 11

12	aggressive, it should be replaced by realistic but
13	still aggressive energy efficiency goal. We would
14	suggest maybe 15 percent by 2020. Given the
15	performance of the top states around the country, we
16	feel that type of a goal for New Jersey would be
17	achievable and would deliver significant benefits.
18	Cancelling the SBC programs and switching to a
19	revolving loan fund would essentially signal that
20	New Jersey has abandoned serious pursuit of energy
21	efficiency. I think that's a path that you would
22	not want to go along. The consequences of that
23	action would include literally billions of dollars
24	in higher utility system costs to New Jersey
25	ratepayers over this coming decade. You can do the

#### J.H. BUEHRER & ASSOCIATES (732) 557-4755

16

1 math. If you look at the energy savings produced 2 per dollar spent and what the projected budgets for 3 these programs would be you could see literally billions of dollars of higher electric system costs 4 5 if you don't use the energy efficiency, but finally, 6 if you do like the idea of loans the concept of 7 adding a loan fund to supplement SBC programs would 8 be a reasonable strategy. Many states use loans as 9 supplements to their core utility energy efficiency 10 programs. It does address one of the various segments that consumers face. So adding a loan 11 12 program to a good suite of energy efficiency 13 portfolio standard programs would probably be a wise 14 course.

15 That's all I've prepared regarding 16 the remarks that I have. I'd be happy to answer any 17 questions. THE PRESIDENT: Just a couple. Are 18 19 there any states that you're aware that have had 20 successful energy efficiency loan programs? And I'm 21 not talking about every penny they spend on clean 22 energy efficiency, but that have a loan program even if it's a portion of their overall energy efficiency 23 and clean energy program that has been successful? 24 25 MR. KUSHLER: Yes. I think it will J.H. BUEHRER & ASSOCIATES (732) 557-4755 17 be coming out in the report probably early next 1 2 month, that reviews loan programs around the country and there are examples. If you understand the 3 4 limited objectives of the loan program, you're only 5 going to reach certain types of markets, certain 6 types of customers. We will be describing a number 7 of case studies, examples of programs that are done 8 well, you know, within that context. 9 THE PRESIDENT: Did you do the -- I 10 didn't. I guess you did, your entity do the analysis of the 25 successful top states. Oh, okay. 11

 11
 analysis of the 25 successful top states. On, of

 12
 You did?

 13
 MR. KUSHLER: Yes.

 14
 THE PRESIDENT: You did the

 15
 analysis?

 16
 MR. KUSHLER: We produced what we

 17
 well

17 call a scorecard every year that ranks all the 50 Page 15

18	states and dimension.
19	THE PRESIDENT: Where is your
20	company based?
21	MR. KUSHLER: Washington, D.C. is
22	the headquarters.
23	THE PRESIDENT: Where are you based?
24	MR. KUSHLER: I work out of
25	Michigan.

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

18

1	THE PRESIDENT: You came all the way
2	to New Jersey to testify?
3	MR. KUSHLER: Yes.
4	THE PRESIDENT: How did you find
5	your way to, what alerted you to this?
6	MR. KUSHLER: I was Steven Nadel,
7	our Executive Director and I filed some written
8	comments a couple of weeks ago and Commissioner Fox
9	contacted us and said, would you have anything else
10	to say if you had an opportunity to provide
11	comments, and New Jersey is quite an important state
12	on our radar screen. A lot of efficiency potential
13	here and so we managed to figure out a way to come
14	out and talk to you today.
15	THE PRESIDENT: The states that you,
16	the analysis that you had loan programs were the
17	programs all run by the states or government
18	entities, utility commission, state government?
19	MR. KUSHLER: There's a mixture of
20	that. In many cases it is run by some type of a Page 16

21	state entity. Sometimes they establish an
22	independent entity, not official part of the state,
23	and there are examples of utilities running loan
24	programs. Probably the most, currently the one
25	that's receiving the most attention is the on-bill

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

19

financing where it's very convenient because customers can see their bills regularly anyway and so there are states now looking to take advantage of that. Still fairly early in the game, but people seem to think that will be the programming technique.

7 THE PRESIDENT: Are there any states 8 that you're aware that have done a wholly privately 9 run energy efficiency program that is essentially an 10 RFP with a target that private companies would bid on or take segments to advertise, sell, develop and 11 12 then implement the energy efficiency program? 13 MR. KUSHLER: I would say almost 14 every state incorporates the private sector a great 15 degree in their programs, because at the end of the 16 day that's who has to do the work. 17 THE PRESIDENT: I'm aware of those. 18 I'm aware of many of those programs and obviously 19 you have a -- I know it's not going to do the 20 contracting work. They all have to bring people in 21 to do the work. Are there any actually that do not 22 involve the state for any purpose other than meeting

23 the target required by the RFP? In other words, Page 17 24 they essentially set it up.

25 MR. KUSHLER: There are a couple of

J.H. BUEHRER & ASSOCIATES (732) 557-4755

20

1 states that have set up independent entities to 2 essentially energy efficiency utility, if you will. THE PRESIDENT: We've spoken with 3 4 that. That's not what I'm talking about. 5 MR. KUSHLER: No. As far as turning 6 it, bidding it out to the private sector the core 7 problem is the economics of energy efficiency are 8 very complex and not easy to run at street level. 9 That's why we don't see private energy service 10 companies flourishing and delivering large scale 11 efficiency services to all types of customers. 12 They've done a pretty good job of certain markets. 13 we call them a mush market, municipal, hospitals, 14 schools, but as far as delivering services to the 15 residential customers it's just there is, there's 16 very little example of success in that on a 17 freestanding basis. 18 THE PRESIDENT: Among private 19 entities. 20 MR. KUSHLER: Yes, yes. What you 21 find is even the states that have set up independent 22 entities to operate their energy efficiency 23 utilities, they still fund those operations through 24 utility charges, ratepayer charges. In other words, they're still buying a resource for the utility 25

#### 082411\_Transcripts J.H. BUEHRER & ASSOCIATES (732) 557-4755

1 system just like paying for electricity from a power 2 plant. The economics are such that you people have talked about this, but it simply doesn't work to 3 4 think that you can create a freestanding 5 self-sustaining efficiency machine that's going to generate lots of efficiency because there's enough 6 7 profit margin in it. Lot of it has to do with all 8 the extensive barriers that I talked about. You know, we could -- I could talk for hours about the 9 10 details of that if you'd like. 11 THE PRESIDENT: We've studied that 12 issue for hours and haven't come up with a solution 13 other than setting aside a pot of money that we 14 don't have. 15 MR. KUSHLER: Yeah. I mean there's also almost realistic if you want utility scale 16 17 efficiency, so you're saving half a percent or a 18 percent, two percent a year enough to avoid substantial generation. You have to invest in that 19 20 the way you would invest in any other resource. 21 THE PRESIDENT: Are there any of 22 these programs that you're aware of that eliminate 23 the need for a customer up front payment, in other 24 words, essentially the loan program or the 25 government program would pay for the entire project

> J.H. BUEHRER & ASSOCIATES (732) 557-4755

> > 22

082411\_Transcripts from dollar one? 1 2 MR. KUSHLER: Yeah. There are 3 certain market niches where that is particularly 4 important. Small business comes to mind. 5 THE PRESIDENT: And residential. MR. KUSHLER: And residential. 6 7 Small business even tougher nut to crack actually, 8 but usually the best programs have a combination of 9 substantial rebate to address that first cost fear 10 act the people see. 11 THE PRESIDENT: I'm saying is there 12 anywhere you don't have -- I don't mean to interrupt 13 you. Just are there any that don't have an upfront 14 cost issue where you don't need the rebate to 15 satisfy upfront cost, essentially it's a zero money down loan that you're aware of? 16 17 MR. KUSHLER: Not really. People have bought there's something called pays that was 18 19 looked at a few years ago and the economics just 20 don't pencil out on that. 21 THE PRESIDENT: What do you mean? 22 MR. KUSHLER: Margins on a 23 residential retrofit are pretty long on payback. 24 THE PRESIDENT: Give me some ideas 25 because I really am interested in the numbers, if J.H. BUEHRER & ASSOCIATES (732) 557-4755 23 1 you know. 2 MR. KUSHLER: Seven to 15 years for 3 a major retrofit. If you try to load all the costs

- - -

082411\_Transcripts of a program onto the cost that the customer faces, 4 5 so there's no utility investment, there's no -- the 6 loading all on the customer, that payback becomes 20 7 or 30 years and you just can't attract 8 participation. So the best programs combined some front end rebate to buy down the first cost and then 9 10 attractive financing for the remainder and you can 11 structure a program where the customer is not out of 12 pocket on Day One, because they combine the rebate 13 with a loan. That's important. There are some 14 small business sector programs that do that. It is 15 possible to work that out, but doing it all through 16 a loan by itself, the numbers just don't work. 17 THE PRESIDENT: Is it possible to use, is it an option to use the revolving loan 18 program, you know, 100 percent financing for 19 commercial, industrial, you know, multi-family, 20 those kinds of targets, offices and rebate plus loan 21 22 for the residential? In other words, would that 23 work at least for the larger customer? 24 MR. KUSHLER: No. 25 THE PRESIDENT: Would not. Why?

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

24

1 MR. KUSHLER: For all of the 2 barriers that I mentioned your multi-family owners, 3 your commercial customers all face those same 4 barriers. So it's very tough to get a commercial 5 customer to go forward even if you pay a third of 6 the cost.

082411\_Transcripts 7 THE PRESIDENT: I'm assuming because 8 there are private companies, believe it or not, in 9 New Jersey that are doing that right now making 10 money and they are not depending on government 11 loans. 12 MR. KUSHLER: Yeah. I know them 13 very well. I know the market niches they work in 14 and it's quite a constrained market niche. It's also a constrained set of measures. There are few 15 16 fast payback items that you can structure a 17 performance contract with provided front end financing as escrow, you know, not have to have a 18 19 rebate, but it's a very limited market niche and 20 it's a very limited set of measures. Yeah, I'm very 21 familiar with the SREC market, how it operates. 22 THE PRESIDENT: Not just the SREC 23 market, but okay. Okay. That's all the questions I have. Anybody else? Commissioner Fox. 24 25 COMMISSIONER FOX: Thank you for

> J.H. BUEHRER & ASSOCIATES (732) 557-4755

> > 25

1 being here. Just two things. With the SREC market, 2 what is that limited niche of measure? What can they do, what can't they do? 3 4 MR. KUSHLER: Well typically, for example, SRECs like to pursue lighting retrofits in 5 6 the commercial market, because that's a pretty big 7 payback. So you can structure a proposal to the business that will allow them to have some margin of 8 9 savings from Day One, but you won't see them get

082411\_Transcripts 10 involved in things like HVAC retrofits, of any kind 11 of big building shell retrofits, that sort of thing. 12 There's a term of art that we use cream skimming 13 which means you skim off the very high payback 14 measures, but you aren't able to be comprehensive. 15 That's one of the barriers involved with that 16 market.

17 COMMISSIONER FOX: Change in subjects to the on-bill financing, which is the one 18 19 you said customers would not, wouldn't have to put 20 any upfront money. What states have started doing 21 that and just very briefly how does that work? 22 MR. KUSHLER: I don't know of any 23 state that has results in hand from that yet. I 24 know that Oregon has been looking. Nobody is 25 investigating it. Vermont will probably in a year

#### J.H. BUEHRER & ASSOCIATES (732) 557-4755

26

1 or two have better data available on what the 2 results of that have been. It gets a little tricky. 3 Not every utility, in fact, most utilities don't, 4 initially don't want to engage in that. So there's 5 some persuasion involved. 6 COMMISSIONER FOX: How do utilities 7 make money doing that? MR. KUSHLER: That also varies 8 9 depending on how the regulator do the programs. 10 Some like to do it without taking any profit on their own and that's one of the barriers. 11 12 COMMISSIONER FOX: Thank you.

082411\_Transcripts THE PRESIDENT: If you figure out 13 14 how not to take that profit let us know. One of the 15 problems we run into when we do that it increases 16 the cost of capital for all the other projects and 17 you end up hurting, not helping the ratepayers. So if you figure that out we'd love to hear it. 18 19 MR. KUSHLER: Yeah. 20 THE PRESIDENT: I'm sorry. Go 21 ahead. Can I -- I don't have your report. I guess 22 I could access it pretty easily. Can we get a copy 23 of that and the report that's about to come out just 24 so we could review it? 25 MR. KUSHLER: Sure, be happy to do J.H. BUEHRER & ASSOCIATES (732) 557-4755 27 1 that. 2 THE PRESIDENT: I'll make sure you 3 have my E-mail address. You can look it up online. 4 Obviously you got here. You know where we are. I 5 appreciate it. 6 MR. KUSHLER: We can get that to 7 you. 8 THE PRESIDENT: Anything else? I'll 9 make sure I give your regards to Commissioner Smith 10 if I see him or Chairman, Commissioner, if I see him 11 before you. If you see him before me tell him I 12 said hello. 13 MR. KUSHLER: Will do. Thank you. 14 THE PRESIDENT: Thank you. Sally 15 Jane Gellert.

082411\_Transcripts 16 MS. GELLERT: Good afternoon. 17 THE PRESIDENT: Hello. How are you? 18 MS. GELLERT: Good. And you? 19 THE PRESIDENT: Good. 20 MS. GELLERT: My name is Sally Jane Gellert. I'm speaking here today on behalf of the 21 22 Unitarian Universalist Legislative Ministry of New 23 Jersey, Economic Justice Task Force, which I am the Chairman. I'm a lifelong resident of Bergen County, 24 25 and I thank you for the opportunity to speak today

#### J.H. BUEHRER & ASSOCIATES (732) 557-4755

28

about the draft of the 2011 Energy Master Plan. 1 2 I will speak briefly reserving my 3 more detailed comments to be submitted in writing. 4 I was pleased to read the following statement in the 5 New Jersey Master Plan. Coal is the major source of 6 carbon dioxide emission and New Jersey will no 7 longer accept coal as a new source of power in the 8 state. This is very encouraging. I am interested 9 to know just how that is interpreted. Does this mean that there will be no purchase again, that the 10 11 proposed experimental clean coal plant that was 12 proposed for the state designated environmental injustice in the community of Linden in Union County 13 has been rejected? 14 15 THE PRESIDENT: Do you want me to 16 answer that? 17 MS. GELLERT: Yes, please. 18 THE PRESIDENT: That proposal has

082411\_Transcripts been rejected. MS. GELLERT: Thank you very much. I am very pleased to hear that especially after having experienced yesterday's earthquake where we're all, you know, we didn't have a lot of damage here, but we're lucky it was far away. We also had an earthquake in December, as you know, and they

## J.H. BUEHRER & ASSOCIATES (732) 557-4755

29

were relatively mild, but they do raise the specter 1 2 of what a pipeline of that length in the ocean would do, what problems it might cause if there were to be 3 4 some sort of fracture and if there were to be 5 carbon. We worry about that and the extra cost that 6 it would involve, which would further call that plan 7 into question economically. 8 I am also aware that there are some 9 indications that climate changes occur may increase 10 earthquake activity and hopefully that information 11 will be considered as the plan gets finalized. Okay. Now, okay. That plan has --12

now, you mentioned that plan has been rejected.
Does that mean that any new coal plant in the state
would also be rejected?

THE PRESIDENT: Yes.

16

MS. GELLERT: Okay. Good. Now, we also have concern about the dangers of attracting and the vast amount of water used and polluted in that process and I would be concerned about proliferation of natural gas plants. We do see a

proposal to build three new gas power plants in the draft proposal. I'm concerned that would be a step backward from fossil fuel and away from investing that money in alternative renewable fuels. If

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

30

there's no coal plant in Linden, would there be some sort of alternative energy on that site, some sort of solar or whatever, that would not contribute particulates to an atmosphere that is already, you know, filled and asthma area?

6 The New Jersey Energy Master Plan is extremely important for New Jersey as it sets the 7 8 stage and creates concrete goals for energy 9 generation, transmission and consumption here. As 10 an energy consumer, every New Jersey resident has a 11 responsibility to use our resources wisely and to 12 help shape public policy that will optimize benefits 13 while reducing hazardous energy use. We owe it to 14 each other to be sure that the burdens and benefits 15 fall equally on all areas of the state. No single 16 community or group of communities is left with the 17 residual problems of generating other communities' 18 energy. And the transportation of frank energy as 19 it were from Pennsylvania into this state raises kind of the spectrum of some danger that we've 20 21 overruled. Thank you for listening to me and I will 22 be submitting further information in writing. THE PRESIDENT: Thank you for your 23 24 time. Any questions? Thank you very much.

# 082411\_Transcripts Steve Morgan. Steve Morgan.

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

31

1	MR. MORGAN: Good afternoon,
2	President Solomon and Commissioners.
3	THE PRESIDENT: Good afternoon.
4	MR. MORGAN: I'm Steve Morgan. I'm
5	the CEO of American Clean Energy. I'm here today to
6	summarize our detailed comments to the Draft EMP
7	plan. Those detailed comments were previously
8	submitted both electronically and in hard copy. I
9	do have a limited number of hard copies with me
10	today. I hope you've had a chance to review them or
11	your staff. It's not my intent to repeat all of
12	those here today, but to summarize just a few
13	points. First one I commend the Christie
14	Administration and the Board for taking up the
15	timely review and amendment of this plan.
16	Obviously a lot has changed since 2008 when we all
17	got together and crafted the first Energy Master
18	Plan and as the plan itself pointed out in several
19	ways, we're at a critical crossroad for energy
20	supply security, cost effectiveness and reliability
21	not just in the state but in this nation.
22	American Clean Energy, LLC is a New
23	Jersey based solar PV developer of net-metered solar
24	projects for commercial, industrial and public
25	sector customers. We believe that solar distributed

J.H. BUEHRER & ASSOCIATES (732) 557-4755

1 generation when integrated with the interconnected 2 grid and eventually coupled with widely distributed 3 energy storage technologies has the ability to take 4 the operation of the grid to the next level of 5 reliability and make it viable for the coming 6 century. 7 That belief frankly is founded on 8 over three decades of experience in the 9 construction, maintenance and operation of the 10 electric T & D infrastructure in this state and 11 others. 12 I want to focus on two areas which I 13 touched on in my detailed comments for which I think 14 are important. First I am mindful of the previous 15 admonishment from the bench that BPU should not and 16 does not intend to making policy from the, from the 17 Board. Wholeheartedly agree and endorse that. We 18 do believe that it is appropriate for the 19 administration and for the Board as a subunit of 20 government to identify issues and propose policy 21 initiatives to solve those problems and obviously 22 that's what this body has done and continues to do and, in fact, we see examples of that in the Energy 23 24 Master Plan. 25 One case in point I would like to

#### J.H. BUEHRER & ASSOCIATES (732) 557-4755

 suggest to you that is not covered in the Energy
 Master Plan, but should be and will require a policy Page 29

32

33

3	initiative and most likely legislative activity, is
4	the siting issues for critical energy
5	infrastructure. We talk about the need to build and
6	site power plants, in this case three gas-fired
7	power plants in New Jersey as an example, but the
8	reason for that, the underlying reasons that drive
9	the need to do that have more to do with the
10	congestion in the New Jersey zone than they do with
11	the lack of generation. We can't attract that. The
12	market forces won't work to attract that generation
13	unless and until the siting concerns can be met and
14	the economics can be covered. I think you have an
15	opportunity to address at least the siting issue,
16	and as the administration has already demonstrated,
17	there is a pathway that can combine the forces of
18	government to solve issues in the form of the
19	economic development activities undertaken by the
20	Christie Administration where you bring together the
21	heads of critical departments and marshal the
22	government to further development activity in the
23	state. I would submit to you that the siting of
24	critical energy infrastructure generation
25	transmission distribution facilities as well as

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

34

 alternative energy facilities is well within your
 purview.
 Now it is true that the Board has
 currently the authority to overrule local zoning and
 planning bodies, but as you know it is a lengthy, Page 30

costly and contentious process and one that's rarely 6 7 invoked and we've had some recent examples of that. 8 So, I would submit to you that there's opportunity 9 to propose a policy initiative, legislative initiative to confer upon somebody in this state, 10 11 state level planning a siting authority for critical 12 energy infrastructure. THE PRESIDENT: I'm recommending one 13 of the other agencies in the state for that. I 14 don't know how you feel about that. I haven't 15 16 decided which one yet. 17 MR. MORGAN: Nobody wants it, but other states have done this. I think the model is 18 19 well developed. I would submit to you that the 20 economic development activities, you know, by the 21 Christie Administration might be an example. 22 THE PRESIDENT: I'm actually 23 kidding, because the Governor and Legislature will 24 decide that. I probably have no say in it. 25 MR. MORGAN: So let me just suggest

> J.H. BUEHRER & ASSOCIATES (732) 557-4755

> > 35

1 as one issue that you consider taking up that issue 2 as a policy proposal. 3 My second point relates more to a 4 belief about distributed energy resources. I think 5 people miss the point, the fundamental value 6 proposition for distributed generation and, again, I spent nearly 33 years in the traditional delivery 7 8 business. I retired from that business in 2009 Page 31

9 specifically to go into the solar distributed energy 10 business in New Jersey, because I believe it is a 11 solution to a problem that is faced not just by the 12 EDCs in this state, but virtually every EDC in this 13 country and it can only be resolved by distributing 14 the resource, the generation resource on top of the 15 load.

16 And I want to address what I think is at least my perception bias in the draft that 17 the, particularly the solar distribution generation 18 19 program under the current SREC program unfairly 20 penalizes non-contributory participants. I can tell you from, I can tell you from personal experience as 21 22 we pointed out in detailed comments and support by the relevant facts, that distributed generation 23 24 particularly solar distributed generation can be a 25 cost effective solution and it has not just

## J.H. BUEHRER & ASSOCIATES (732) 557-4755

36

1 attributes of generation. It has the attributes of 2 distribution. So it avoids transmission generation 3 and distribution infrastructure investments. It 4 displaces the importation of generation during peak periods and if we think about the fact that we need 5 6 about two gigawatts by 2020 of solar, just the solar 7 set aside requirement and maybe almost five 8 gigawatts by 2026. You look at the numbers. 9 There's a sense that the SREC program has been too 10 rich, and I would argue not rich enough. We have -we need 2.2 gigawatts by 2020. We have about 330 or 11 Page 32

12	350 megawatts installed. Only half of that under
13	the SREC program. That argues that the SREC program
14	is not rich. Otherwise we'd be more than 13 percent
15	done, but more importantly there's been a focus that
16	the SACP declination schedule has been too high and
17	while we support the proposal to step that down in
18	2017, what is most important and what has been
19	missing is the long-term declination schedule. We
19 20	missing is the long-term declination schedule. We need to create certainty in that market. Certainty
20	need to create certainty in that market. Certainty
20 21	need to create certainty in that market. Certainty is the key here, not so much the level and as we've
20 21 22	need to create certainty in that market. Certainty is the key here, not so much the level and as we've seen as a matter of fact, in recent SRECs, prior

#### J.H. BUEHRER & ASSOCIATES (732) 557-4755

37

1 this for two years, but for the economic recession 2 we have already seen this happen and we fully expect 3 and all of our plans are predicated on that, on the price of SREC to be volatile going forward to 4 continue to oscillate over some trend line well 5 6 below the SACP declination schedule. Those oscillations, I would presume to make this Board 7 8 aware those oscillations can be driven as much by 9 what our, what is said or not said as they can be by 10 the supply situation. And I would just quote a 11 recent Philadelphia Inquirer article where a BPU 12 spokesperson said something to the effect that they 13 don't expect the current lowest SREC prices to have 14 any material effect on the market because most Page 33

15	people were in long-term contracts. I would submit
16	to you that if the project is already built and
17	contracted and the SRECs are already laid out on the
18	long-term contract that might be one set of
19	circumstances, but if you're talking about new
20	projects where new investors, new money have to be
21	brought to the table that clearly is not the case.
22	And low SREC prices are definitely a deterrent
23	people making that investment going forward. We
24	need to be mindful that what we say and how we say
25	it has an impact on that market and on that market

#### J.H. BUEHRER & ASSOCIATES (732) 557-4755

38

1 volatility and that has a direct impact on what will 2 or will not get built going forward. More important 3 though, I think there is a bias in the draft plan 4 that, that it doesn't fully understand the value of 5 distributed generation resources, particularly solar 6 distributed generation resources. I won't bore you with the details of that conversation now. It's 7 8 laid out in my detailed comments along with 9 supporting details, but we spend on average, I'm looking at the form, one data for 2010 for the EDCs 10 11 in New Jersey. If you look at the book value of 12 assets installed in New Jersey, it's about 1100 13 bucks a KW. If we make the comparison between solar 14 and generation or solar and delivery only, we would 15 conclude, oh, it's solar is more expensive because that's what the numbers would tell you, but when we 16 17 understand that solar distributed generation has the Page 34

attributes of generation and transmission and 18 19 distribution and we compare the cost against all of 20 those costs, then we would conclude something quite different. Remember also that we're comparing a one 21 time expense in terms of the RPS solar requirement 22 23 essentially a one time expense. Two, to perpetuate 24 expenses in the State of New Jersey and as the chart 25 in my detailed comments point out, those investments

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

39

1 and plan in service are going up over time. They're 2 not going down, and that will continue to be the case and the reason for that frankly again, based on 3 4 my experience is because about the top ten percent 5 of the peak demand in this state occurs for less than one percent of the hour served. Okay. 6 7 Understand the economics. We're making an 8 investment to serve that top ten percent of the peak 9 that is only operational one percent of the year or 10 less. 11 THE PRESIDENT: You're preaching to 12 the choir on that. 13 MR. MORGAN: So when you look at --14 well, so the point is when you make an economic comparison and you do it, you know, on an 15 16 apples-to-apples basis what you conclude is not only that solar distributed generation and really 17 18 distribution generation in general where you have solar distributed generation in particular is the 19 20 wise investment every time for the long term.

21	So I just wanted to close by saying
22	that we appreciate the fact that the Draft Energy
23	Master Plan continues to support the renewable
24	portfolio standard, that it continues to understand
25	the importance of the solar set aside, and we will

### J.H. BUEHRER & ASSOCIATES (732) 557-4755

40

spend as much time as necessary and make ourselves available to talk to you and your staff as to the relevant experience of both on the T & D side as well as the solar distributed generation side. So, thank you for your time.

6 THE PRESIDENT: Thank you, Mr. 7 Morgan, and thank you for your written comments. I 8 think everybody up here and certainly all the staff 9 have read and I want to tell you that it was not the 10 intention of the Master Plan, I don't believe, to create the impression that we were not sensitive to 11 12 and did not consider there to be value in 13 distributed generation including solar. I thought 14 it had expressed that fairly clearly in the solar 15 context. It may be one of the weaknesses that we 16 need to revisit so that everybody understands, 17 because we try to make it clear that the value of 18 distributed generation was to deal with our 19 reliability issues at peak times, which we know are 20 two percent or less of the times that we're using 21 the resource. It clearly has an impact on rates. It drives the margins way up and, frankly, requires 22 23 that we allow facilities to run that I know the BPU Page 36

24 and our Governor and Administration would prefer not 25 to see this growing. We're sensitive to it. It may

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

41

1 be we weren't clear enough about it. We'll 2 certainly take those comments to heart. 3 MR. MORGAN: Thank you. We hope 4 that we've given you at least one example of how you 5 might find a way to do it, a more balanced economic 6 valuation of the alternatives, because we agree with 7 you wholeheartedly that we need to look at cost on 8 everything that we do and we think we can if we look 9 at it rationally to make a comparison on a normalized basis that, in fact, would give us the 10 11 right answers. So thank you very much. 12 THE PRESIDENT: Thank you. 13 Bruce Burcat. Yes, sir. 14 MR. BURCAT: Good afternoon, Mr. President, Members of the Board. My name is Bruce 15 16 Burcat. It's spelled B-u-r-c-a-t. I am the 17 Executive Director of the Mid-Atlantic Renewable 18 Energy Coalition, in short MAREC. 19 I want to thank you for the 20 opportunity that you have provided me to speak about 21 the Draft Energy Master Plan on behalf of my 22 organization. MAREC is a nonprofit organization 23 that was formed to help advance the opportunities 24 for renewable energy development primarily in the 25 region where the Regional Transmission Organization,

#### 082411\_Transcripts J.H. BUEHRER & ASSOCIATES (732) 557-4755

1 PJM operates. MAREC's footprint includes New Jersey 2 and eight other jurisdictions in the region. Our membership consists of wind 3 developers, wind turbine manufacturers, service 4 5 companies and nonprofit organizations dedicated to 6 the growth of renewable energy technologies to 7 improve our environment, boost economic development 8 in the region and diversify our electric generation 9 portfolio, thereby enhancing energy security. The 10 primary area of focus of MAREC is to work with state 11 regulators and policymakers to develop rules and 12 supportive policies for wind energy. 13 First, let me say that the Draft 14 Energy Master Plan in many areas is a reasonable approach to energy planning, especially in light of 15 16 economic realities. These realities include the 17 fact that New Jersey residents pay some of the 18 highest energy rates in the nation. The overriding 19 theme of the Draft Energy Master Plan, I believe is 20 that New Jersey ratepayers pay too much for their 21 electricity and that all resource procurement and 22 development, whether done to meet general 23 electricity needs or to meet the RPS should be 24 evaluated based on whether the procurement is cost 25 effective. So, I want to emphasize that it is well

> J.H. BUEHRER & ASSOCIATES (732) 557-4755

42

43

082411\_Transcripts understood and sensible that the focus on cost 1 2 effectiveness of New Jersey's energy options plays a 3 significant role on the draft plan. However, the 4 Draft Plan fails to consider a significant renewable 5 energy resource, regional onshore wind energy, which 6 would provide New Jersey ratepayers a cost effective 7 opportunity to help meet the mandates of the 8 Renewable Energy Portfolio Standard. 9 Wind energy is a zero emitting 10 renewable resource that is readily available to New 11 Jersey through its participation in the PJM grid and 12 markets. It is important to keep in mind that the 13 State of New Jersey is part of a broad regional 14 electricity market comprising over a dozen states 15 and that solutions to the state's energy challenges must be viewed in this context. Whether purchased 16 17 in the form of a renewable energy credit or as a bundled product of energy and RECs, electricity 18 19 developed from wind generated by onshore wind farms 20 presents a resource that should be seriously 21 considered by the Draft Plan. 22 One of the things that we noticed is 23 really this idea of developing homegrown, which is 24 understandable resources within New Jersey. 25 However, it's apparent that New Jersey is going to

> J.H. BUEHRER & ASSOCIATES (732) 557-4755

> > 44

need outside resources to help meet the RPS standard
 that's in effect and there's really almost nothing
 as cost effective as onshore wind coming from within

082411\_Transcripts 4 the region. 5 From a price perspective it compares 6 favorably to other energy resources when comparing 7 new construction of these generating resources. 8 Not only is wind energy cost effective, but policies 9 supporting long-term contracts for wind energy help 10 get these projects financed at reasonable rates and 11 ensure price stability. This is because the 12 resource itself is not subject to the price volatility like other traditional fossil fuel 13 14 resources over the long term, such as coal and 15 natural gas. In addition to the draft plan's 16 support of offshore wind, we think it is important 17 that onshore wind resources be considered as a significant resource in helping New Jersey meet its 18 renewable portfolio standard. 19 20 Now we know that the existing Energy Master Plan, it's the one that's in effect at that 21

time tasked the BPU staff to seek an increase in total renewable portfolio standard from 22.5 percent in 2021 to 30 percent by 2020. While we have serious reservations over the draft plan's proposal

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

45

to drop the 30 percent requirement, there's no doubt
 that the RPS mandates if otherwise unchanged would
 still be meaningful.

4 That being said, it is distressing
5 that the Draft Energy Master Plan appears to propose
6 the inclusion of resources like waste-to-energy into

082411\_Transcripts the Class I requirements of the RPS. While 7 8 preferable to landfilling, waste energy is not 9 renewable nor are its environmental impacts and 10 benefits equal, or anywhere close for that matter, 11 to those of renewable resources such as wind, solar 12 and geothermal energy. Incentivizing waste energy 13 as a Class II energy resource would be appropriate 14 in that it encourages an alternative form of energy production that can have some environmental 15 16 benefits, but it should not in any way be included 17 in Class I to the detriment of true renewable energy 18 resources. 19 The other major downside of this 20 proposed change is that it will significantly erode 21 the RPS. The RPS Class I requirements were meant to 22 spur development of renewable energy technologies. 23 Waste-to-energy is not a legitimate Class I resource. When an RPS standard is amended to move a 24

## J.H. BUEHRER & ASSOCIATES (732) 557-4755

non-renewable energy source, such as waste energy,

25

46

into Class I, the incentives to produce clean and 1 2 renewable technologies are weakened. So we strongly urge that the draft plan be revised to eliminate any 3 4 proposals for re-categorizing any non-renewable resource to a Class I RPS qualifying resource. 5 6 This concludes my remarks. I just 7 want to thank you again for the opportunity to be heard on the Draft Energy Master Plan. 8 9 THE PRESIDENT: Just a couple of

	082411_Transcripts
10	quick questions.
11	MR. BURCAT: Sure.
12	THE PRESIDENT: I'm assuming and I
13	understand the potential necessity to import out of
14	state renewables like wind and solar from elsewhere
15	to meet our R-20s. What the Master Plan was
16	speaking to availability of onshore wind in New
17	Jersey and I think if it didn't, we'll clarify it.
18	It said, I can look it up now, I don't feel like
19	wasting your time, that the availability of that
20	resource in New Jersey is either limited or
21	non-existent. Now, we know it exists in some
22	places. There is one or two locations down the
23	shore. There's one or two locations in Salem
24	County. There's one or two locations in way up
25	north, I believe it's in the Highlands. So, there's

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

47

1 not a whole lot of opportunity. I mean I think some 2 of it is preserved, some of it is highland, some of 3 it is in densely populated areas. So it's very 4 limited. Are you aware of any other onshore wind 5 opportunities in New Jersey? And I don't think, I 6 hope at your suggestion, but also because we've 7 heard that elsewhere, whether we are attempting to 8 limit our access to onshore wind, or simply saying, 9 listen, it's not a resource available in New Jersey 10 and so we have to look at other opportunities? Is 11 it available in New Jersey? 12 MR. BURCAT: Well --

13 THE PRESIDENT: I mean I'm not 14 trying to trap you. 15 MR. BURCAT: My research actually 16 goes back to the original or to the current Master 17 Plan, which called, it talked about 200 megawatts of onshore wind within New Jersey. I agree. 18 New 19 Jersey does not have the best resources for onshore 20 wind. So there is a limited resource. Even 200 megawatts of onshore wind is not going to go a long 21 22 way meeting your plan. That's why I think you're 23 going to have to ignore, it is a problem. You're 24 going to have to look at the regional onshore wind 25 and the way the energy, Draft Energy Master Plan is

082411\_Transcripts

## J.H. BUEHRER & ASSOCIATES (732) 557-4755

48

1 prepared or drafted clearly suggests a very strong 2 bias for not doing that and the advantage of this 3 resource is that it's very cost effective in 4 comparison to a lot of resources that you're looking 5 at at the moment, and on top of it there aren't, do 6 not appear from my review of the plan, we're sending 7 more detailed comments tomorrow on this, but my 8 review is that you're going to need even if you get 9 the 1100 megawatts of offshore wind, which is I 10 think, you know, we commend New Jersey for moving in that direction, you'll still have a significant 11 12 issue of compliance without going significantly 13 greater into or looking at other resources especially like offshore wind, which is prevalent. 14 15 And I did want to make one other

082411\_Transcripts point that there are concerns and it's mentioned to 16 17 a degree in the Draft Plan about the transmission infrastructure and some issues about that, but I 18 19 have been part of the process and it's been going on 20 PGA for guite some time now, to include renewables in this planning process. So they're looking at 21 22 improving transmission and it's also part of order 23 of 1000. So this a long-term plan. I think this is an area that's been glossed over. It needs 24 25 significant discussion and discussion in the Energy

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

49

1 Master Plan.

2 THE PRESIDENT: Should we have 3 concern that because, should we have concern -- the 4 Legislature is clearly, Governor as well about the 5 desire to see offshore wind developed as a renewable 6 resource. Should we be concerned that significant 7 importation of onshore wind, not just from 8 Pennsylvania, but from the Midwest which appears to 9 be a consideration of FERC and others including 10 groups that I've participated in to try to raise my 11 voice about that might not, in fact, displace 12 offshore wind as an opportunity for New Jersey 13 because there are those that argue, although I'm not sure that the cost of onshore wind combined with the 14 15 cost of transmission is substantially cheaper. The 16 Legislature and Governor have said we need to look at offshore wind and the economic benefit. Will 17 18 that be displaced if you --

082411\_Transcripts<br/>MR. BURCAT: I don't think so, and19MR. BURCAT: I don't think so, and20the reason, main reason for it is you have a law21that is talking about 1100 megawatts of offshore22wind and so, and I think there's in the law it has a23very detailed procedure for, you know, for24potentially approving that.25THE PRESIDENT: Yes, there is.

## J.H. BUEHRER & ASSOCIATES (732) 557-4755

50

1 We're aware of it.

2 MR. BURCAT: So, I don't think it's 3 going to be displaced at least in New Jersey. Other 4 states that don't have such laws 1100 megawatts seem 5 to be a realistic number at this point. So we're 6 not thinking in those terms. We're also not 7 proposing the Midwest. We're talking about the PJM 8 wind and at the present there's been significant 9 development in Pennsylvania, which is a good bit on 10 the correct side or the better side of the 11 constraint. So, you know, there are opportunities 12 even with some of the transmission constraints out 13 there there's significant opportunity, but we do 14 think there can be improvement in the long run as 15 well. 16 THE PRESIDENT: Should we be 17 exploring and are you advocating that we explore any 18 onshore opportunities in New Jersey? 19 MR. BURCAT: Yes, absolutely. I think everything should be explored and there is a 20 21 reason why the previous plan up to 200 megawatts are

22	part of the plan. So there may not be commercial
23	type projects because those usually are anywhere
24	from 50 to 300 or 400 megawatt-sided plants, but
25	they're smaller applications, you have one in New

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

51

1 Jersey already, smaller applications that could add 2 up to significant numbers if you build. If you look 3 in that direction it's just not going, it's just not going to fill the void. That's why other onshore 4 5 wind opportunities in the region are something you really need to look at. 6 THE PRESIDENT: Any other questions? 7 8 Thank you very much. 9 MR. BURCAT: Thank you. 10 Chris Tomasini. 11 MR. TOMASINI: Thank you, President 12 Solomon and the Board of Commissioners. My name is 13 Chris Tomasini, T-o-m-a-s-i-n-i. I am the Vice 14 President of Market Development of Ice Energy. 15 Thank you for the opportunity to provide input to 16 the Draft Energy Master Plan. Ice Energy has been 17 active in the New Jersey market for several years, 18 is eager to expand our presence here providing both 19 jobs and lower energy prices. We currently 20 manufacture our equipment in New York State and 21 would love the opportunity to shift those 22 manufacturing jobs to New Jersey. THE PRESIDENT: I'll let the 23 24 Governor call you tonight.

082411\_Transcripts MR. TOMASINI: We applaud the fact

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

52

1 that the current plan recognizes energy storage 2 technology and feel that the Energy Master Plan 3 should qualify energy shortage goals as a component 4 of demand reduction goals. For those of you who don't follow 5 6 the technology closely, energy stored just benefits 7 including relieving congestion without costly 8 controversial generation or transmission 9 expenditures and energy enhanced value of the 10 intermittent resources like wind and solar. Energy 11 storage reduces overall emission profile within the 12 state by reducing the need for people to generate 13 optimizing base low plants. 14 THE PRESIDENT: Make sure you take 15 your time. 16 MR. TOMASINI: Sure. Energy storage 17 improves load factor of the existing grids like all 18 the industries, important capacity factor like we 19 experience here in New Jersey, is the root cause of 20 high costs. New Jersey loan factor is, capacity 21 factor is one of the lowest in the U.S. Energy 22 storage allows small businesses to participate in 23 the low management programs. There are solutions in 24 place for residential customers and for larger 25 industries. Small businesses cannot or will not get

> J.H. BUEHRER & ASSOCIATES (732) 557-4755

> > Page 47

(. 52)

1 involved in most low management programs. Ice 2 Energy's focus on commercial businesses range from 200,000 square feet that utilize rooftop cooling. 3 Ice Energy has met with all the utilities in New 4 5 Jersey, would like to see a regulatory framework of 6 distributed storage working closely with First 7 Energy, JCP&L and we installed Force Ice, which is 8 the name of our technology, in the Township of 9 Howell at a national office supply retailer. Four 10 Ice barriers were installed and permanently reduced 11 the store's peak load by 20 percent. Ice Energy has demonstrated its cost effectives using screening 12 13 tools developed by the Centre For Energy and 14 Environment at Rutgers University. Very few 15 permanent load reduction technologies can meet these 16 standards and all customer segments need to 17 participate in load reduction if New Jersey hopes to 18 achieve its 3600 megawatt load reduction goals 19 identified in the EMP. Despite the economy, summer 20 heat and low continues to take the grid to the 21 breaking point, risking public safety and consumer 22 confidence. We respectfully suggest that the policy 23 needs to catch up to available cost effective 24 technology such as distributed discharge. We will be submitting formal comments. 25

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

54

1

THE PRESIDENT: Thank you. Any

2 questions?

53

3	Kate Sanford.
4	THE PRESIDENT: How are you?
5	MS. SANFORD: Good. Thank you.
6	President Solomon and Commissioners, I just wanted
7	to thank you, first of all, for the opportunity to
8	speak today. I appreciate it. My name is Kate
9	Sanford and I'm the Director of Corporate
10	Communications at JSH International. JSH
11	International is actually part of the J.S.
12	Hovnanian, as you know, group of companies, owned by
13	Peter and Stephen Hovnanian.
14	I just wanted to take a quick moment
15	to explain JSH International is actually a
16	manufacturer of a line of organic products. We
17	improve biological efficiency with these products in
18	a variety of environments and our efforts are
19	currently focused in the wastewater and energy
20	industries as well as food services and septic
21	industries and horticulture and agriculture
22	industries.
23	I'm here today to make a few
24	comments on our written submittal recently regarding
25	the classification of renewable resources.
	J.H. BUEHRER & ASSOCIATES
	(732) 557-4755 55
	22
1	According to the definition of Class I renewables in
2	the Master Plan, anaerobic digestion is mentioned.
3	However, sewage sludge has been significantly
4	singled out to not qualify. By broadening the scope
5	of the Class I renewables, the state would be able Page 49

6 to impact two or three probably of the overarching 7 goals of the EMP stated in the beginning, such as 8 diversifying portfolio of clean and state generation 9 as well as promoting to improve energy efficiency at 10 facilities that are often the most demanding energy 11 function in a particular municipality. You may 12 already know these kinds of information, but 13 wastewater treatment accounts for 40 or 30 percent 14 of the municipal and wastewater treatment plant 15 energy costs are the second largest operations and maintenance expense after labor. Also, wastewater 16 17 treatment plant operators could reduce energy consumptions by 25 percent by optimizing process 18 19 efficiencies and greatly improving energy recovery 20 with available technologies. 21

21 Wastewater treatment plants bring a 22 really unique opportunity to the table when it comes 23 to renewable energy production. They are a steady 24 supply of the resource. There's great potential 25 with existing infrastructure that's already in

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

56

1 place, yet only a handful of plants are utilizing 2 the gas they generate as a normal part of the 3 treatment process here in the State of New Jersey. 4 According to a report by the EPA, CHP partnership 5 about opportunities of bio-gas and CHP and 6 wastewater treatment plants approximately 340 megawatts of clean electricity could be generated 7 8 nationally and offsetting 2.3 metric tons of carbon Page 50

9	dioxide emissions annually. That's equivalent to
10	planting approximately 640,000 acres of forest or
11	the emissions of approximately 430,000 cars. Now I
12	know those are national statistics and, in fact,
13	they are updating this report right now. They say
14	they're expecting it to be released very shortly.
15	So that may be beneficial for us to learn more. But
16	in New Jersey, our company estimates that there
17	could be about 50 anaerobic digestion systems here
18	in New Jersey, yet it is our experience in the
19	industry and not working in learning more and
20	getting to know people that lead us to believe there
21	are approximately only eight that utilize DHP, so a
22	very small percentage. They capture the energy
23	others are letting go to waste. Although the
24	megawatts and carbon emissions I described earlier
25	are on an annual or a national scale, we can see

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

57

there's great opportunity just right here in New 1 2 Jersey to take advantage of the many benefits this 3 renewable resource can bring to the state. There's 4 also the opportunity to reduce carbon emissions in 5 the state as a result. Facilities that don't 6 utilize the methane actually flare it off as I'm 7 sure you're familiar with. When they flare, for 8 every kilogram of methane flared 2.74 kilograms of 9 carbon dioxide are produced. So, therefore 2.75 10 more carbon dioxide is emitted every time they flare 11 as compared to CO2 is to go in there directly. So I Page 51

12 recommend to the committee to reconsider the 13 definition of eligible resources in the renewables. 14 In order to encourage and enable expansion of 15 bio-gas utilization because there's such great 16 opportunity here in the state that's currently going 17 to waste, by incorporating sewage sludge some policy up towns facilitating the expansion of CHP in 18 wastewater treatment plants would include financing 19 20 development of new or expansion of existing digester in CHP systems, we often find that when we're doing 21 22 business that many existing systems are just 23 underutilized due to the repairs and maintenance 24 issues, not having the funding to make those improvements. Therefore, letting a lot of gas just 25

## J.H. BUEHRER & ASSOCIATES (732) 557-4755

58

go to waste or it's due to further investment into
 some more capital equipment to utilize the extra gas
 that they are creating. So that's definitely one
 option that's out there.

5 To help expand this marketplace in 6 renewable energy production here in the state you 7 can also fund development and demonstrations 8 technology that improve digester gas yields as well. 9 So I just want to thank you very much for your time 10 and the opportunity to comment today. I think they want to keep it short, but we think that's there 11 12 great opportunity here just in the State of New 13 Jersey. It's definitely underutilized at this 14 point.

15 THE PRESIDENT: Thank you very much. 16 Any questions? 17 COMMISSIONER FOX: I have one question. First of all, I have to say I'm not a 18 19 technical person. 20 MS. SANFORD: That's okay. I'm not 21 either, but I have technical people in case I need 22 them. COMMISSIONER FOX: Combined heat and 23 power, I think traditionally is natural gas, steam, 24 25 electricity, all that stuff?

## J.H. BUEHRER & ASSOCIATES (732) 557-4755

59

1 MS. SANFORD: Uh-huh. 2 COMMISSIONER FOX: How does solid waste or how does organic anaerobic bio-gas 3 4 digestion fit into a combined heat power that's not 5 traditional? 6 MS. SANFORD: Sure. The way that it works is that and I'll try to keep it very simple, 7 8 but wastewater treatment has a number of options to 9 process wastewater. One of them is processing the 10 solid that is a result, those go into maybe not every place uses it. That's why I say we estimate 11 12 about 50 here in New Jersey. They use a process 13 called anaerobic digestion to handle it. When it 14 goes into this anaerobic digestion it's a closed 15 unit so that it captures and allow that time to process in there and make it more of a useful 16 17 sludge. They call it sewage sludge considering what Page 53

18 I'm suggesting here today. During that natural 19 process or that breakdown within that anaerobic 20 digester methane gas is as a result of the process. 21 These wastewater treatment plants are now capturing 22 the gas that is created in these systems. 23 COMMISSIONER FOX: So you use a 24 methane in place of a natural gas? 25 MS. SANFORD: Yes. Then they do the

> J.H. BUEHRER & ASSOCIATES (732) 557-4755

> > 60

1 cleaning, et cetera through the system that they 2 need to, it goes into CHP. COMMISSIONER FOX: Then what happens 3 4 with the remaining sludge? 5 MS. SANFORD: They still have, they do still need to handle applied for, for example, or 6 7 they can, they have a number of options out there 8 today something palleting. 9 COMMISSIONER FOX: I know about 10 that. So really the difference really here --11 MS. SANFORD: Methane gas is a fuel. 12 COMMISSIONER FOX: Methane gas in 13 place of natural gas? 14 MS. SANFORD: Yes. COMMISSIONER FOX: So my 15 16 understanding with methane gas is that from sources 17 like those is you don't have a consistency of 18 product which then could be a problem when you're using it for, I guess in this case combining power? 19 20 MS. SANFORD: In our experience, in Page 54

21	the wastewater treatment industry in particular it's
22	a pretty expected rate quality of the methane gas.
23	It's something that we have found is expanding in
24	the industry. People who don't have it are actually
25	moving to it because they see that the type of gas

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

61

1	that they generate is relatively consistent and
2	could be a very reliable source for themselves.
3	COMMISSIONER FOX: Thank you.
4	MS. SANFORD: Uh-huh.
5	THE PRESIDENT: Mr. Asselta.
6	COMMISSIONER ASSELTA: Yes. I guess
7	about a year ago I received a presentation based on
8	this from your owner and boss, and I know K.
9	Hovnanian and JSH. The question I have is
10	considering their construction power over the years
11	and the thousands of homes both divisions have built
12	over the years, have they ever used this in an up
13	highland situation in considering a lot of
14	development sewer treatment option to them because
15	they're so large?
16	MS. SANFORD: No. We have focused
17	our efforts in particular on the very large public
18	wastewater treatment plants because that is, if you
19	will, the biggest opportunity for the whole country
20	to go after at first.
21	COMMISSIONER ASSELTA: And you have
22	the patent. Right?
23	MS. SANFORD: We do. Page 55

24COMMISSIONER ASSELTA: JSH?25MS. SANFORD: We do. We have a

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

62

1 patent on the process that creates our core product. 2 As I said, we do a number of industries and we optimize that particular core product to these 3 4 different applications, different industries. And 5 this one in particular we do, to speak to your 6 question a little bit more, we particularly target 7 very large facilities five million gallons a day or 8 higher and the reason why we actually believe we can 9 bring that lower to be very honest, the EPA in their CHP work that they have done, CHP partnership they 10 11 have calculated and estimated that the ideal plant 12 size to move to CHP is in the four and a half, five 13 million gallons a day to make the investment to a 14 CHP. So, the little resources that you can actually 15 get statistics on these things. It's amazing how, 16 you know, available statistics are for these things. 17 That's what they have, so we focus on that. So in 18 instances where there's building involved your 19 numbers are much lower in a smaller community, et 20 cetera. COMMISSIONER ASSELTA: Just one 21 22 quick follow-up. Have you been successful in some 23 of these sewage authorities in New Jersey at this 24 point in time? 25 MS. SANFORD: Yes, we have.

# 082411\_Transcripts J.H. BUEHRER & ASSOCIATES (732) 557-4755

1 COMMISSIONER ASSELTA: Where? 2 MS. SANFORD: In particular, Landis Sewage Authority in Vineland, New Jersey has been 3 4 using our product for a number of years. Last year 5 in November of 2010, they were awarded an EPA CHP 6 Energy Star Award for their efficiency of expertise 7 leading the way with their CHP unit there on site. 8 That's one example. We have a number of other 9 projects here in the state that are either right now 10 are wrapping up, so at this point I can't disclose 11 their names. 12 COMMISSIONER ASSELTA: Thank you 13 very much. 14 MS. SANFORD: We have done work with some places without CHP, but since our focus here is 15 on renewable energy. 16 17 THE PRESIDENT: Commissioner Fox. 18 COMMISSIONER FOX: Do you know of 19 any other states who use this for the Class I 20 renewables? 21 MS. SANFORD: I'm sorry. I don't 22 know the answer to that, but I'm happy to find out 23 and E-mail it in. 24 COMMISSIONER FOX: Please do get it 25 to our staff because I wouldn't mind having the J.H. BUEHRER & ASSOCIATES (732) 557-4755

64

63

082411\_Transcripts staff visit those sites. 1 2 MS. SANFORD: No problem. 3 THE PRESIDENT: Thank you very much. 4 Chris Sturm. Good afternoon. 5 MS. STURM: Good afternoon, Commissioner Solomon and Members of the Board. 6 7 Thank you for allowing me to testify. I'm Chris 8 Sturm from New Jersey Future. We're a nonprofit, 9 non-partisan group that promotes smart growth. From 10 that perspective that we submitted detailed written 11 comments which I'll summarize today. 12 The first area that I want to talk 13 about is locating solar facilities. New Jersey 14 Future encourages increased reliance on renewable 15 energy sources including solar energy. Our state is unquestionably a national leader in solar 16 17 installations, due in large part to subsidies that make it economically feasible. The Draft Energy 18 19 Master Plan correctly noted that ratepayer subsidies 20 can be used to incentivize certain types of projects 21 that also advance other statewide goals. 22 We have two recommendations. First, 23 we'd like to see the Energy Master Plan recognize 24 that single-use solar facilities aren't necessarily 25 the highest or best use for every brownfield and J.H. BUEHRER & ASSOCIATES (732) 557-4755

65

landfill location in New Jersey. Some of those
 happen to be in good locations for redevelopment and
 installing solar there might impede those more

082411\_Transcripts intensive uses of the site. So we recommend that 4 5 before a solar installation is granted that the BPU 6 require applications for solar incentives and ask 7 whether or not it is in an approved redevelopment 8 area with a redevelopment plan and if it is, that the municipality be consulted to make sure that the 9 10 solar facility will not impede redevelopment in that 11 location.

12 Our second recommendation is the 13 Energy Master Plan should recognize and incentivize 14 those types of solar facilities that are advancing 15 other statewide policy objectives which include 16 brownfield and landfills, but other impervious 17 surfaces, such as rooftops and parking garages. These have few or no negative impacts on land 18 19 preservation or redevelopment and other land use 20 objectives. And we'd like to ask why not grant more generous incentives to encourage solar in those more 21 22 advantageous locations.

23 I do want to just note that our 24 research suggests that there's more than enough 25 rooftop locations in New Jersey to accommodate the

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

66

1 state's long-term goals for solar. We have a 2 graduate intern who looked at this question from two 3 perspectives. One is he estimated the total amount 4 of square footage of rooftop that would be needed to meet the state's solar goals for 2026 and found 5 6 those to be about 327 million square feet, which is

082411\_Transcripts just a small fraction of the total amount of 7 8 impervious surfaces in New Jersey, which is stated 9 at 22 billion square feet. The second approach looked at a 10 11 national study that estimated the solar output capacity of our rooftops in residential and 12 13 commercial buildings and found those to be 9000 14 megawatts, which is more than double the state's solar goals for 2026. Now, admittedly both of these 15 16 approaches apply assumptions across a broad area 17 without detailed analysis, but they do suggest that the capacity of solar and rooftop should not be 18 19 constrained for your set of policies. 20 The second topic area that I wanted 21 to cover is energy use from the transportation 22 sector. As you know, the transportation sector is 23 the largest and fastest-growing consumer of 24 electricity. However, the Draft Energy Master Plan 25 scarcely mentions it. There are numerous studies

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

67

that point out that clean energy and electric vehicles are not enough to rein in demand from the sector because of just an ongoing increase in the amount of driving in vehicle miles traveled. So any credible approach needs to address transportation demand.

Back in 2008, the Draft Energy
Master Plan at that time delegated this topic to the
state's global warming recommendations report at

082411\_Transcripts 10 DEP. 11 The DEP not only recognized the 12 sizeable scale of this problem, but minced no words 13 in pointing to the state's sprawling land use 14 patterns as playing a key role in transportation 15 demand and also greenhouse gas emissions. However, 16 since its release in 2009, that plan has largely 17 laid dormant. So what we have is a Draft Energy Master Plan that really doesn't address 18 19 transportation at all and DEP's Global Warming 20 Response Act Recommendations Report, which it does 21 pay a lot of attention to transportation, but is 22 evidently being ignored by policymakers. 23 So our recommendation to you that 24 through this process the state formally and 25 comprehensively address energy use and greenhouse

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

68

1 gas emission from the transportation sector, and we 2 have a number of suggestions for how that can be 3 done contact-wise. The third and final area that I want 4 5 to touch on just has to do with the state's 6 commitment to a great economy and green future. With Governor Christie's announcement of the state's 7 8 intention to withdraw from RGGI, we at New Jersey 9 Future lamented the fact that it seemed to signal a 10 shift away from earlier commitments to a green 11 economy. 12 A number of provisions in the Draft

13	082411_Transcripts Energy Master Plan suggests a similar trend and so
14	what we'd like to recommend is that you sort of
15	proactively find other ways to commit to a green
16	economy and to encourage more high quality, high
17	paying jobs in this field. One approach and I
18	recommend that it's not an easy approach, but would
19	be to find ways to replace the funds that were
20	generated or are being generated by RGGI and that
21	have been dedicated to energy conservation, to
22	encouraging increased use of renewables to helping
23	municipalities plan for sustained land use and
24	transportation projects. That kind of funding would
25	not only reduce energy costs for all users, but

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

69

1	would also help make our companies more effective.
2	I thank you for your consideration.
3	THE PRESIDENT: Any suggestions
4	about the source of those funds?
5	MS. STURM: That is a hard question.
6	I mean we would, I, our recommendation would be to
7	stay on RGGI.
8	THE PRESIDENT: I agree.
9	MS. STURM: Yeah.
10	THE PRESIDENT: Any ideas?
11	MS. STURM: That's, as you know,
12	that's a difficult question. Our recommendation
13	would be to stay on RGGI.
14	THE PRESIDENT: Okay. But assuming
15	that's not going to happen, we're still bound by the
	Page 62

082411\_Transcripts Global Warming Response Act, which is still a law of 16 17 the State of New Jersey, which is, I think it gave rise to RGGI. What would you do to increase the 18 I mean you don't have any idea? 19 revenue available? 20 MS. STURM: I'm sorry. I quess I'm 21 not prepared. 22 THE PRESIDENT: If you come up with 23 something let us know. MS. STURM: Okay. Fair enough. 24 25 THE PRESIDENT: The suggestions of J.H. BUEHRER & ASSOCIATES (732) 557-4755

70

the transportation side, are they part of your 1 2 written comments that we have? 3 MS. STURM: Yes. Well, we 4 highlighted a number of items that were in the 5 Global Warming Response Act Report. 6 THE PRESIDENT: I'm aware of that. 7 And on the issue of brownfields and landfills, I'm 8 not aware of what landfills that are being 9 commercially developed. Maybe they are, but I 10 thought maybe we weren't clear enough. Certainly 11 I've said it probably one of the goals was to take 12 otherwise undevelopable land and use it for solar 13 like brownfield, landfills to the extent that it, a brownfield is developable and can have another 14 15 benefit. I think municipalities obviously should go 16 in that direction. So maybe we need to be clear about that one. We have consensus on the issue. 17 18 MS. STURM: The issue, I think it

082411\_Transcripts 19 really varies site by site. I think you're 20 absolutely pointed in the right direction for solar 21 because the cleanup as you have people living and 22 working on them, but I think there are instances 23 where it's a little easier in the short term to do 24 solar which might preclude the more intensive use 25 which would not be that far. That's why we

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

71

1 recommend consultation with municipalities. 2 THE PRESIDENT: All right. Anything 3 else? Thank you very much. 4 MS. STURM: Thank you. 5 THE PRESIDENT: Nicky Sheats. Good 6 afternoon. 7 DR. SHEATS: Good afternoon. It's 8 good here to hear my name. I've been here for over 9 two days. Can I hand out copies to you? 10 THE PRESIDENT: Sure. 11 DR. SHEATS: Good afternoon. My 12 name is Nicky Sheats, Dr. Sheats. I am Director of the Center for the Urban Environment of the John S. 13 14 Watson Institute for Public Policy at the Thomas 15 Edison State College. I'll try to talk slow. I 16 talk very low. 17 THE PRESIDENT: I'll slow you down 18 or the court reporter will start throwing that 19 machine at you and it's very heavy. DR. SHEATS: I'm the Director of the 20 21 Center for the Urban Environment at the Thomas

22	Edison State College, but more importantly, I'm a
23	member of the New Jersey Environmental Justice
24	Alliance. In case you probably don't know about the
25	Alliance, so let me say we are the only statewide

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

72

1 environmental organization in New Jersey that 2 focuses solely on the environmental justice issues. 3 we're also the only statewide environmental 4 organization in New Jersey in which both a majority 5 of this membership and leaders are people of color. And I should note that I'll talk briefly about it 6 7 later is that I think that's an important point. 8 Because I've now been to three of the four hearings 9 for international planning and I think I'm the first 10 person to speak on behalf of the organization of 11 this majority of the people of color, and I'm one of 12 the few people of color to speak at all, but I think 13 those are important points that I'll get back to. In case you don't know what 14 Environmental Justice Alliance do, we try to protect 15 communities of color and low income neighbors by 16 17 reducing excessive pollution and we also try to make sure that they are a part of any decisions that are 18 made that affect them. So we do have concerns about 19 the Energy Master Plan, some about what is in the 20 21 plan and some about what is not in the plan. 22 Let me talk about three concerns that are in the plan and then give you a suggestion 23 24 on what should be in the plan. One in the plan

25 suggests that in order to reach a goal aspiration of

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

73

1 70 percent of our electricity generation from 2 renewable or clean energy by 2050 and opposes 3 nuclear energy and should be classified as clean 4 energy. We disagree with this. The reasons very simple. Both of these when used for electric 5 6 generation produce toxic by-products. We know 7 natural gas is much cleaner than traditional coal 8 companies, coal-fired power plants, but it still 9 does produce some air pollution. Nuclear, I think 10 we're all aware of toxic waste that comes from 11 nuclear and still unresolved issue about where that 12 waste is going to go to. So that's the first 13 concern. We would oppose that. 14 We also think it really puts in 15 jeopardy that goal, 'cause the purpose of the goal is to incentivize renewable energy and when you're 16 17 starting to classify things that aren't renewable then it really starts to eliminate the goal. 18 19 Second at this time we don't agree 20 with the suggestion from the plan that New Jersey 21 sudden increase on reliance of natural gas plans for 22 electrical generation. Two reasons said some of that before. We really have concerns that expanding 23 24 natural gas use in New Jersey is going to harm 25 communities on both ends of where natural gas is

> J.H. BUEHRER & ASSOCIATES (732) 557-4755

1 extracted and where it is used to generate 2 electricity. This would involve our state in the 3 very controversial issue of hydraulic fracturing 4 which just has not been resolved. I'm not an expert 5 on hydraulic fracturing or any for that matter, but 6 I think, I think until we resolve those issues and 7 try to understand if we're going to impose some very 8 real cost on the communities where natural gas is 9 extracted, we shouldn't be expanding on use of 10 natural gas. I think the plan does not take into 11 account the possible environmental costs of that own 12 extraction and as environmentalists we're worried about all communities, not just those communities in 13 14 New Jersev.

15 On the other end, we're concerned 16 about where the natural gas will be turned to 17 produce electricity and already we see that the plan 18 mentions that one of the new natural gas plants 19 being proposed would be sited in Newark. We have 20 information that the plant probably will be sited in 21 the Ironbound community of Newark. You heard from 22 the Ironbound community corporation already. That 23 is an environmental justice community. It has too 24 many pollutant facilities already and so until the 25 siting issues of this end of the use of natural gas

> J.H. BUEHRER & ASSOCIATES (732) 557-4755

are resolved we would oppose the expansion of
 natural gas.
 Page 67

75

74

<ul> <li>figure from the, that uses DEP data and it shows</li> <li>that in New Jersey, unfortunately, and it's a</li> <li>classic environmental injustice issue,</li> <li>unfortunately, the amount of pollution in the</li> <li>neighborhood of knowledge is correlated with race</li> <li>and income. So if you look at the two areas, one</li> <li>represents race, one represents income. On the</li> <li>left-hand side is a score of cumulative impacts</li> <li>which loosely can be thought of the amount of</li> <li>pollution in the neighborhood. You'll see as the</li> <li>number of people of color in the neighborhood</li> <li>increases the amount of cumulative impacts in the</li> <li>neighborhood increases also. And as the number of</li> <li>lower income people in the neighborhood increases so</li> <li>does the pollution. And if you site natural gas</li> <li>plants or any kind of new electrical generated</li> <li>plants in New Jersey you're going to be perpetuating</li> <li>what is to us an obvious environmental injustice.</li> <li>Now, I should say that this</li> <li>relationship not only occurs in New Jersey. One</li> <li>thing to start the environmental injustice movement</li> <li>about 20 years ago where report of this happens</li> </ul>	3	And one thing I handed to you was a
<ul> <li>classic environmental injustice issue,</li> <li>unfortunately, the amount of pollution in the</li> <li>neighborhood of knowledge is correlated with race</li> <li>and income. So if you look at the two areas, one</li> <li>represents race, one represents income. On the</li> <li>left-hand side is a score of cumulative impacts</li> <li>which loosely can be thought of the amount of</li> <li>pollution in the neighborhood. You'll see as the</li> <li>number of people of color in the neighborhood</li> <li>increases the amount of cumulative impacts in the</li> <li>neighborhood increases also. And as the number of</li> <li>lower income people in the neighborhood increases so</li> <li>does the pollution. And if you site natural gas</li> <li>plants or any kind of new electrical generated</li> <li>plants in New Jersey you're going to be perpetuating</li> <li>what is to us an obvious environmental injustice.</li> <li>Now, I should say that this</li> <li>relationship not only occurs in New Jersey. One</li> <li>thing to start the environmental injustice movement</li> </ul>	4	figure from the, that uses DEP data and it shows
unfortunately, the amount of pollution in the neighborhood of knowledge is correlated with race and income. So if you look at the two areas, one represents race, one represents income. On the left-hand side is a score of cumulative impacts which loosely can be thought of the amount of pollution in the neighborhood. You'll see as the number of people of color in the neighborhood increases the amount of cumulative impacts in the neighborhood increases also. And as the number of lower income people in the neighborhood increases so does the pollution. And if you site natural gas plants or any kind of new electrical generated plants in New Jersey you're going to be perpetuating what is to us an obvious environmental injustice. Now, I should say that this relationship not only occurs in New Jersey. One thing to start the environmental injustice movement	5	that in New Jersey, unfortunately, and it's a
8 neighborhood of knowledge is correlated with race 9 and income. So if you look at the two areas, one represents race, one represents income. On the 11 left-hand side is a score of cumulative impacts 12 which loosely can be thought of the amount of 13 pollution in the neighborhood. You'll see as the 14 number of people of color in the neighborhood 15 increases the amount of cumulative impacts in the 16 neighborhood increases also. And as the number of 17 lower income people in the neighborhood increases so 18 does the pollution. And if you site natural gas 19 plants or any kind of new electrical generated 20 plants in New Jersey you're going to be perpetuating 21 what is to us an obvious environmental injustice. 22 Now, I should say that this 23 relationship not only occurs in New Jersey. One 24 thing to start the environmental injustice movement	6	classic environmental injustice issue,
9 and income. So if you look at the two areas, one represents race, one represents income. On the left-hand side is a score of cumulative impacts which loosely can be thought of the amount of pollution in the neighborhood. You'll see as the number of people of color in the neighborhood increases the amount of cumulative impacts in the neighborhood increases also. And as the number of lower income people in the neighborhood increases so does the pollution. And if you site natural gas plants or any kind of new electrical generated plants in New Jersey you're going to be perpetuating what is to us an obvious environmental injustice. Now, I should say that this relationship not only occurs in New Jersey. One thing to start the environmental injustice movement	7	unfortunately, the amount of pollution in the
10 represents race, one represents income. On the 11 left-hand side is a score of cumulative impacts 12 which loosely can be thought of the amount of 13 pollution in the neighborhood. You'll see as the 14 number of people of color in the neighborhood 15 increases the amount of cumulative impacts in the 16 neighborhood increases also. And as the number of 17 lower income people in the neighborhood increases so 18 does the pollution. And if you site natural gas 19 plants or any kind of new electrical generated 20 plants in New Jersey you're going to be perpetuating 21 what is to us an obvious environmental injustice. 22 Now, I should say that this 23 relationship not only occurs in New Jersey. One 24 thing to start the environmental injustice movement	8	neighborhood of knowledge is correlated with race
11 left-hand side is a score of cumulative impacts 12 which loosely can be thought of the amount of 13 pollution in the neighborhood. You'll see as the 14 number of people of color in the neighborhood 15 increases the amount of cumulative impacts in the 16 neighborhood increases also. And as the number of 17 lower income people in the neighborhood increases so 18 does the pollution. And if you site natural gas 19 plants or any kind of new electrical generated 20 plants in New Jersey you're going to be perpetuating 21 what is to us an obvious environmental injustice. 22 Now, I should say that this 23 relationship not only occurs in New Jersey. One 24 thing to start the environmental injustice movement	9	and income. So if you look at the two areas, one
12 which loosely can be thought of the amount of 13 pollution in the neighborhood. You'll see as the 14 number of people of color in the neighborhood 15 increases the amount of cumulative impacts in the 16 neighborhood increases also. And as the number of 17 lower income people in the neighborhood increases so 18 does the pollution. And if you site natural gas 19 plants or any kind of new electrical generated 20 plants in New Jersey you're going to be perpetuating 21 what is to us an obvious environmental injustice. 22 Now, I should say that this 23 relationship not only occurs in New Jersey. One 24 thing to start the environmental injustice movement	10	represents race, one represents income. On the
pollution in the neighborhood. You'll see as the number of people of color in the neighborhood increases the amount of cumulative impacts in the neighborhood increases also. And as the number of lower income people in the neighborhood increases so does the pollution. And if you site natural gas plants or any kind of new electrical generated plants in New Jersey you're going to be perpetuating what is to us an obvious environmental injustice. Now, I should say that this relationship not only occurs in New Jersey. One thing to start the environmental injustice movement	11	left-hand side is a score of cumulative impacts
number of people of color in the neighborhood increases the amount of cumulative impacts in the neighborhood increases also. And as the number of lower income people in the neighborhood increases so does the pollution. And if you site natural gas plants or any kind of new electrical generated plants in New Jersey you're going to be perpetuating what is to us an obvious environmental injustice. Now, I should say that this relationship not only occurs in New Jersey. One thing to start the environmental injustice movement	12	which loosely can be thought of the amount of
15 increases the amount of cumulative impacts in the 16 neighborhood increases also. And as the number of 17 lower income people in the neighborhood increases so 18 does the pollution. And if you site natural gas 19 plants or any kind of new electrical generated 20 plants in New Jersey you're going to be perpetuating 21 what is to us an obvious environmental injustice. 22 Now, I should say that this 23 relationship not only occurs in New Jersey. One 24 thing to start the environmental injustice movement	13	pollution in the neighborhood. You'll see as the
16 neighborhood increases also. And as the number of 17 lower income people in the neighborhood increases so 18 does the pollution. And if you site natural gas 19 plants or any kind of new electrical generated 20 plants in New Jersey you're going to be perpetuating 21 what is to us an obvious environmental injustice. 22 Now, I should say that this 23 relationship not only occurs in New Jersey. One 24 thing to start the environmental injustice movement	14	number of people of color in the neighborhood
17 lower income people in the neighborhood increases so 18 does the pollution. And if you site natural gas 19 plants or any kind of new electrical generated 20 plants in New Jersey you're going to be perpetuating 21 what is to us an obvious environmental injustice. 22 Now, I should say that this 23 relationship not only occurs in New Jersey. One 24 thing to start the environmental injustice movement	15	increases the amount of cumulative impacts in the
does the pollution. And if you site natural gas plants or any kind of new electrical generated plants in New Jersey you're going to be perpetuating what is to us an obvious environmental injustice. Now, I should say that this relationship not only occurs in New Jersey. One thing to start the environmental injustice movement	16	neighborhood increases also. And as the number of
19 plants or any kind of new electrical generated 20 plants in New Jersey you're going to be perpetuating 21 what is to us an obvious environmental injustice. 22 Now, I should say that this 23 relationship not only occurs in New Jersey. One 24 thing to start the environmental injustice movement	17	lower income people in the neighborhood increases so
20 plants in New Jersey you're going to be perpetuating 21 what is to us an obvious environmental injustice. 22 Now, I should say that this 23 relationship not only occurs in New Jersey. One 24 thing to start the environmental injustice movement	18	does the pollution. And if you site natural gas
21 what is to us an obvious environmental injustice. 22 Now, I should say that this 23 relationship not only occurs in New Jersey. One 24 thing to start the environmental injustice movement	19	plants or any kind of new electrical generated
<ul> <li>Now, I should say that this</li> <li>relationship not only occurs in New Jersey. One</li> <li>thing to start the environmental injustice movement</li> </ul>	20	plants in New Jersey you're going to be perpetuating
<ul> <li>relationship not only occurs in New Jersey. One</li> <li>thing to start the environmental injustice movement</li> </ul>	21	what is to us an obvious environmental injustice.
24 thing to start the environmental injustice movement	22	Now, I should say that this
	23	relationship not only occurs in New Jersey. One
25 about 20 years ago where report of this happens	24	thing to start the environmental injustice movement
	25	about 20 years ago where report of this happens

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

76

nationally. We're also concerned with the
 suggestion that waste energy should be used, should
 be expanded. For most of the same reason as the
 natural gas plants, wasted energy will produce air
 pollution even though the plan says that their waste
 Page 68

energy will be, I think used latest technology and 6 7 how strict the emission limit. There will still be emissions. Local residents and residents downwind 8 9 of that will likely be harmed and again the issue of siting. There are two incinerators already in 10 11 environmental injustice neighborhoods in New Jersey, 12 one in the Ironbound section of Newark that I just 13 mentioned. Another reason we don't want that to have a natural gas plant at the Waterfront South 14 15 community in Camden. So, again, we're worried that 16 you'd be adding emissions to neighborhoods that 17 already have too many pollutant facilities, have too much pollution. 18 19 But let me tell you one of our 20 solutions. I just told you what we don't want. Let 21 me tell you what we think is missing from the plan. 22 we think the plan needs coherent urban energy plan.

The way we produce the energy in the future, I think we all recognize this has a possibility of transforming our society and transforming New Jersey

## J.H. BUEHRER & ASSOCIATES (732) 557-4755

77

1 and we want to make sure that it is done the way 2 that does not perpetuate any inequality in our 3 society. In fact, we think it can be done in a way 4 that actually starts to help push back on those 5 inefficient qualities. We think that's why we need 6 a coherent urban energy plan. A few things that would include 7 8 would be energy efficiency techniques and extensive Page 69

9	use of renewable energy, energy efficiency in urban
10	areas, but we would say the focus of that needs to
11	be in urban areas. That would do at least three
12	things. It would reduce traditional air pollution
13	that's been allowing to happen, so that would make
14	the community healthier. We talk about the
15	particulate matter, air pollution. Energy
16	efficiency, renewable energy would decrease that, so
17	it would make the community healthier. It would,
18	climate change would provide jobs and other economic
19	opportunities. And we do, we do talk about things
20	beyond jobs, entrepreneurial opportunities and the
21	chance for urban areas to be centers for research
22	and development. We do recognize the job is key.
23	So another thing we'd like to see urban plan to be
24	some specific policy that make sure that urban
25	residents get the fair share of jobs that are

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

78

ing
·ina
. mg
ies.
ion
s in
t

12 energy efficiency programs and we agree with that. 13 Delaware already has sustainable utility on the 14 state level. It can be done on the state level, on 15 the city level, neighborhood level. We would really 16 encourage that. I can hear you asking me, Mr. 17 Solomon, President Solomon, how are you going to pay for it? We, you know, we --18 19 THE PRESIDENT: That was my question. 20 21 DR. SHEATS: And I feel you on that 22 one. What I refer to in my comments continue that 23 it ultimately gets to the question where that's going to come from. I'm not a fiscal expert, but I 24 25 think the Governor would have to raise money to

## J.H. BUEHRER & ASSOCIATES (732) 557-4755

79

invest in renewable energy efficiency 'cause it's
 hard to see how we're going to advance on that
 without government investment and particularly in
 our urban areas.

5 The last thing I mention the policy 6 that should be part of a coherent urban energy 7 policy society issue. We have to resolve the issue of keeping new energy plants away from communities 8 9 that are already overburdened with pollution and make sure we make those, that we make those 10 communities healthier, not unhealthy, not add to the 11 12 disease in those communities through our energy plan. And I really think that if we did have 13 14 sensitive use of renewables and energy efficiency in Page 71

urban areas, couple that with a siting policy, we would like actually start to address the issue that you see on the handout that I give reversing that relationship between race, income and pollution which I think we all, none of us want that. So energy policy can start to be a solution for that also.

I'll close by saying that, I think one reason certainly a complex problem, one reason you're not seeing more people of color here or more people of color come in and testify, you know, where

## J.H. BUEHRER & ASSOCIATES (732) 557-4755

80

1 is the NAACP, where black issues convention to 2 mainstream organization in New Jersey that focus on policy issues. You know, one of the issues we have 3 4 I understand why you do think we need to expand. I 5 could spend my time to sit here and do it, but a lot 6 of community residents cannot do that, but I think 7 the larger issue is the plan does not speak to urban 8 issues, does not speak to urban residents. It's not 9 relevant for them. It's not sufficiently relevant 10 for them to come out and spend time to testify or to put time into thinking about it. I think the plan 11 12 focuses on delivering, consistently delivering 13 energy at a lower price which you have to do, but I think that's not enough to get folks in urban 14 15 societies excited about it, but I think some of the things I talked about if they started to see that 16 17 the energy plan would not only lower the energy, but Page 72

18 start to transform economic environment, make 19 communities healthier, they start to see that as 20 part of the Energy Master Plan, then I think they will come to the table. They will give you 21 22 suggestions. They will be energized and I think, of 23 course, the more people you have that are energized 24 you have a whole new population. You're reaching a 25 whole new population in the urban areas that you

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

81

have a better much chance of success speeding your 1 2 plan. No, no. Thank you for your -- I hope it was worth the wait. Thank you. 3 4 THE PRESIDENT: I just have one. I 5 mean has any consideration been given to -- by the way, you said one of the plans is proposed in the 6 7 Ironbound section? 8 DR. SHEATS: Yes. 9 THE PRESIDENT: There is a permanent 10 location for one of the successful LCAT bidders in 11 the Newark area. 12 DR. SHEATS: Right. THE PRESIDENT: I don't, maybe I'm 13 not familiar with the city. I don't believe it's 14 the Ironbound section or is it Ironbound? 15 16 DR. SHEATS: Yeah. 17 COMMISSIONER FIORDALISO: Where 18 exactly? THE PRESIDENT: I'm not familiar 19 20 enough with these areas. Page 73

21	COMMISSIONER FIORDALISO: Do you
22	know where? Do you know where in the Ironbound?
23	DR. SHEATS: I can't tell you where
24	in the Ironbound, but the Ironbound community is
25	part of the Environmental Justice. They can

J.H. BUEHRER & ASSOCIATES (732) 557-4755

82

1 certainly pinpoint it. 2 COMMISSIONER FIORDALISO: I didn't 3 think it was the Ironbound. I was born and raised 4 in the Ironbound, so I'm trying to --5 DR. SHEATS: No. We started hearing 6 that months ago. Hesa actually reached out to the 7 community, Ironbound community, spoken to them about 8 that. 9 THE PRESIDENT: Has any 10 consideration been given to the plans and the 11 facilities that would be displaced by a new combined 12 cycle, recycle facility? In other words, what the 13 net environmental impact would be? I mean there's 14 some discussion of the LCAT report, but there's also 15 analysis and some other information shall be 16 forthcoming. Has any consideration been given to 17 that? We have a number of even coal-fired plants, 18 but oil fired and --19 DR. SHEATS: Yup. 20 THE PRESIDENT: That theoretically 21 would be displaced or ultimately closed while we 22 attempt to ramp up and utilize renewables in a more 23 effective way, basically storage becomes more Page 74

24 available. Has any consideration been given to that 25 as a bridge?

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

83

DR. SHEATS: Yeah. And that debate 1 2 is going on in the environmental community, but in 3 the Environmental Justice community which is a separate community, two issues or maybe three issues 4 5 with just that one issue is just what you said 6 theoretically. You know, if we and I in the report 7 it said that you'll get a net reduction in 8 pollution. We like to, like to have some kind of 9 guarantee of that, because right now what we see is 10 natural gas plant is added to what's already in 11 these communities. So, we hear that, but it may displace pollution, but we don't see written 12 13 anywhere any guarantee written in the law. That's 14 one issue. 15 The other issue is that is there the 16 Environmental Justice movement really talks about local effects and that's one of the issues we've had 17 18 with the consideration in the mainstream movement 19 about climatic change of effective capital trade, 20 that if you put something in Ironbound overall in 21 the region a part of the state you may have 22 reduction of pollution, but what's going to happen 23 to the local folks in the Ironbound? Are they going 24 to suffer because of that? And then new wild card

25 has been, has been fraction, the hydraulic fraction.

# 082411\_Transcripts J.H. BUEHRER & ASSOCIATES (732) 557-4755

1	So any concern with what's happened on the
2	extraction end? You know, what's natural gas going
3	to do to those communities on the other end? So,
4	it's complex and we do talk about it. We debate it.
5	That's why I said, you know, we are currently
6	opposed to this until a lot of this is resolved, and
7	I think a debate, a real robust debate has to be
8	around, will it be the proper bridge. You know, if
9	we really did invest much more in renewables and
10	energy efficiency in a very, you know, very
11	extensive way and really made a commitment to it,
12	could we do that. Some of the people think
13	THE PRESIDENT: I think that debate
14	is going on right now. This is only a small piece
15	of it, but if it was demonstrated and concluded that
16	there would be a net environmental benefit, not just
17	location, but to the state and region you might
18	change your position on gas-fired generation.
19	DR. SHEATS: We would certainly have
20	to take another look at it. Then, I think the major
21	issue would be what do we think, could we have a
22	bridge of renewables. Then, I think I would shift
23	to that debate. I think would go there and one
24	point, I guess a major point I want to make to you
25	we need to bring the urban areas into this. A lot

J.H. BUEHRER & ASSOCIATES (732) 557-4755 84

85

082411\_Transcripts of debate is not taking place. Representatives from 1 2 the inner city, representatives from people of color 3 with people who have constituency with the low 4 income communities. 5 THE PRESIDENT: Thank you. Any other questions? Thank you. 6 7 Stephanie Nelson. 8 MS. NELSON: Good afternoon. My 9 name is Stephanie Nelson. I volunteer with the 10 LaRouche Pac. I study physical economic science and 11 I have a lot of issues with the EMP, but I'm going 12 to focus on just two. 13 The first one is the very premise of 14 the EMP, New Jersey's 2007 Global Warming Response 15 Act. I was not a resident of New Jersey at the time, but I'm shocked that this kind of legislation 16 17 found credence, because the idea of man-made climate change is a complete fraud. The argument that CO2 18 19 is a cause of temperature and climate change on the 20 planet is so unfounded that it would be laughable if 21 the consequences of such an outlook weren't so 22 genocidal. 23 Moving to incidental solar and wind 24 energy and shutting down heavy industry will hardly 25 even make a dent in the planet's total volume of J.H. BUEHRER & ASSOCIATES (732) 557-4755 86 1 CO2, but it will make it impossible to sustain the approximately seven billion people on the planet. 2 3 East Anglia University, a top global warming

082411\_Transcripts research center, has been caught lying and making up 4 5 its data. Man-made global warming is a lie, pushed 6 by individuals like Hans Joachim Schellnhuber in 7 order to reduce the human population down to about 8 one billion. The British Empire's Prince Phillip, founder of the world wildlife Fund, has offered to 9 10 be reincarnated as a deadly virus in order to help 11 achieve this. We're talking extermination beyond Hilter's wildest dreams, not millions of people, but 12 billions. 13 14 Back to New Jersey. We're the 15 Garden State. I would think that the people of New Jersey might have more respect for CO2, since it is 16 17 plant food. If you want a green planet with lots of plant life you're going to need lots of CO2. 18 Now, the EMP and Global Warming bill 19 20 are riddled with all kinds of false assumptions, but I am going to take up the notion of efficiency. 21 22 If you look at the real progress of 23 nature, and of the biosphere there seems to be in an 24 environmentalist's terms, a lot of inefficiency. 25 Take the case of mammals who

> J.H. BUEHRER & ASSOCIATES (732) 557-4755

> > 87

replaced reptiles as the dominant animal type
 several million years ago. Reptiles are like solar
 panels; they sit there, absorb energy from the sun.
 They don't do a lot. They don't consume much food,
 but mammals who were preferred by the biosphere,
 have to consume a magnitude more food to sustain the

082411\_Transcripts same amount of bodily material or biomass as a 7 8 reptile. For example, a lizard absorbing a certain 9 amount of food, uses 85 to 90 percent of that for 10 metabolism, leaving ten to fifteen percent for creating new biomass. That's not bad. Whereas a 11 mammal of the same size and weight, say, a mouse for 12 13 its absorbed food, 97 to 99 percent is used up in 14 its metabolism and only one to three percent is left for the creation of new biomass. That seems pretty 15 inefficient. 16 17 So over hundreds of millions of years of development, up from single-celled 18 19 organisms, to soft bodied animals, through the 20 development of skeletal, respiratory, nervous 21 systems, from amphibians reptiles to mammals, as 22 well as the more complex and energy dense plant life 23 that has developed in order to sustain these more complex, energy dense animals, you see that these 24 25 biosphere systems have become more energy intensive.

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

88

Nature has chosen time and time again life forms
 that an environmentalist would consider wasteful and
 inefficient, aren't at all concerned with minimizing
 energy loss and actually need to consume more and
 more.
 The human species, which is a

qualitatively exceptional mammal, should do the
same; not reduce its energy demand as the EMP
prescribes, but create and consume more energy dense

082411\_Transcripts resources, such as nuclear fission and fusion. 10 11 That energy source could be used to drive the most 12 intensive economic activity, such as high-speed 13 rail, modern agriculture, and human space flight. Since the EMP, conceived as it was, 14 might as well draft a proposal for the whole 15 16 biosphere to reverse back to the reptiles or maybe 17 amphibians, or even back to single-celled organisms, this Board should throw all these hours and hours of 18 19 hearings out the window, and go tell the New Jersey 20 legislature to draft policy and legislation that's 21 actually human. 22 THE PRESIDENT: Thank you. Any 23 questions? 24 MS. NELSON: No questions about

25 that?

## J.H. BUEHRER & ASSOCIATES (732) 557-4755

89

1 David Sims. THE PRESIDENT: NO. 2 MR. SIMS: Good afternoon. First of 3 all, I want to thank the Board for all the effort 4 you're putting into these hearings. Secondly, I'm 5 dead against nuclear myself. I am an installer of 6 solar efficient. I've been working under the Public 7 Utilities programs since 1994 and I certainly appreciate it and definitely drawing some 8 9 conclusions from this stuff. You guys are doing a 10 good job. So I'll start with that. Almost everything I was going to say has been said. I 11 12 fully realize I'm speaking to the choir here. You

082411\_Transcripts 13 guys are trying to do the right thing and get this 14 stuff straightened out. 15 One comment I would make to you, 16 sir, is that regarding the source of funds. I live 17 in a carbon negative home. For the last 15 years 18 I've been putting in one technology after the next until we've got it to where we don't really use 19 20 energy off the grid anymore. Our house is pretty 21 much self-sufficient. My residential solar systems 22 was that I took out a 30-year mortgage on my home 23 and every single month the stuff puts out more 24 energy than the incremental cost on the mortgage to 25 get it. So, in effect I got all my systems for

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

90

1	entirely free and I've got an income stream from
2	them every month.
3	THE PRESIDENT: So you would
4	disagree with Dr. Kushler who says a financing
5	program, long-term inexpensive financing program
6	could work even for residential?
7	MR. SIMS: I neither agree or
8	disagree with Mr. Kushler. He obviously has put a
9	huge amount of effort into his comments, I thought
10	were excellent. Okay? The fact that loan programs
11	are weak is something that I could address. It
12	depends on how you do it. If you finance the stuff
13	over 30 years or 15, for that matter, you got a
14	totally winning modality for free energy and added
15	income stream. So I can speak from personal

082411\_Transcripts 16 experience on that one. Okay? 17 THE PRESIDENT: That's all I was 18 wondering. 19 MR. SIMS: Yeah. I also think that 20 a tiered billing system is something worth considering. The people who use more energy should 21 22 really maybe bear the brunt of it a little bit. 23 That tiered billing system is in use in California 24 now and I think they're doing a great job of that 25 one, and I don't pretend I'm any kind of a high

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

91

level --1 2 THE PRESIDENT: You thought 3 California was doing a great job? 4 MR. SIMS: Well, I think the tiered 5 billing portion of it. Okay? The state itself --6 THE PRESIDENT: Okay. 7 MR. SIMS: I'm just saying the 8 tiered bill thing is really worth some extra 9 consideration. 10 THE PRESIDENT: Do you have any 11 thoughts about a tiered billing system based on the 12 quantity of use, a tiered billing system based on the time of use, so that there would be a different 13 charge for peak use than would be for off-peak use? 14 15 MR. SIMS: I appreciate you asking 16 me that question. I mean there is already demand charges of a pretty substantial amount, but the 17 18 rougher those demand charges are the more likely the

19 large users, such as bowling centers and real energy 20 intensive projects and manufacturing will actually 21 focus on reducing their peak use. So solar, of 22 course, addresses that pretty good and then all the 23 energy that comes from solar is it's all peak use. 24 It's all daytime energy. So solar is, impact on 25 that is really worth considering.

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

1 And again, I know I'm talking to the 2 choir, but one real topic that I mean is worth considering is the amount of labor required for 3 4 energy efficiency projects. We're in a real labor 5 crisis right now in New Jersey. The amount of labor 6 required for an energy efficiency project is, is 7 huge. We do a lot of energy efficiency projects and 8 our staff has just kept growing the entire time 9 through these programs. The fact that many jobs are 10 generated through the implementation of energy efficiency is a real, that's a real plus and I think 11 12 that that's got to account for guite a bit also, the labor factor of the stuff. 13

14 Additionally, I think that the solar 15 farms, the large ones that are going in, they're 16 great for meeting the state's RPS, but they're swamping out this industry to the point where an 17 18 already shy residential and small system. You know, 19 clientele are really going to get hurt by the lack of an RPS, one, by the lack of a renewable energy 20 21 credit. So I think it's very important that you

92

082411\_Transcripts carefully consider that piece of the puzzle also and 22 23 I can see from these hearings that you got lots of the pieces of the puzzle to consider. So I'm just 24 25 trying to, you know, offer you my insights. Again,

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

93

1 I'm dead set against the nuclear. I think that is 2 just a totally unacceptable approach as do many of 3 the countries of the world now after what happened 4 in Fukushima. So as far as increasing our energy 5 use as the LaRouche people use, it doesn't even make 6 any sense to me. Just about everything I've got to say has really been said to death. 7

8 I mean one comment that I think is 9 worth mentioning is about coal burning efficiency. 10 I mean between the lion's loss from the coal burning 11 plants --

12 THE PRESIDENT: Who said that? MR. SIMS: Well, one comment that 13 has been made is that solar is a very inefficient 14 way to get energy. I want to comment that these 15 16 solar conversion rate of panels is not even remotely 17 related to the actual efficiency of solar, actually is used in one of the panels in the infrastructure 18 19 exists and again, I know you guys are aware of that, 20 but once you got it in, you're using the sun's 21 energy, which is pretty much free fuel, no carbon 22 load, no questionable problems whatsoever when you get to that point, but solar may actually be more 23 24 efficient than coal burning right now because of the

25 lion's loss, the transmission, lion's allowance, the

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

94

1 inefficiency of the coal burning plants themselves, 2 new solar plants are approaching efficiency of and 3 now I'm talking about solar conversion efficiency of over 16 percent. So, you know, I think the fact 4 5 that you don't have to give any fuel to the process 6 is really something worth considering. 7 Okay. Again, one real concern as a 8 small installer of a family business, without the 9 RPS support, the already confused residential 10 customers don't have the final appreciation of the 11 details of this that you folks have. 12 THE PRESIDENT: I hear you. 13 Commissioner. 14 COMMISSIONER: She's killing me. 15 THE PRESIDENT: Has nothing to do with the Board of Public Utilities. 16 17 MR. SIMS: I've always believed the incentives were high enough throughout the program 18 19 for people to consider them, but they couldn't get 20 it. They don't understand about a 30-year mortgage 21 makes it totally free, even a ten-year mortgage 22 would do the trick. How do we get them to understand it? We've talked to so many people it's 23 24 ridiculous over the last 15 years, and most of them 25 just don't get it. They don't understand why they

> J.H. BUEHRER & ASSOCIATES (732) 557-4755

1	should air seal their house or why they should boost
2	up their installation levels. When it comes to
3	solar they're so confused. Why would I spend 45, 50
4	to get a \$250 electric bill. They don't follow the
5	analysis at all. So most of them just go, okay,
6	interesting presentation. They walk on from there.
7	I think that education of the population is
8	something that you guys are trying to encourage and
9	will continue to try to encourage, but there's still
10	a lot of that, lot of that left to do. Just don't
11	get it. Okay. Thank you very much.
12	THE PRESIDENT: Thank you. Any
13	questions? Thank you, sir. I appreciate your time.
14	David Pringle.
15	MR. PRINGLE: Thank you, Mr.
16	President. David Pringle. I'm the campaign
17	director for the New Jersey Environmental
18	Federation. We are the Garden State Chapter of the
19	Clean Water Action Group that works on water issues
20	and water being universal, so it pretty much gets us
21	involved in many policy issues and while I do have a
22	science degree from Princeton, I'm not a
23	practicing
24	THE PRESIDENT: I won't hold that
25	against you.
	J.H. BUEHRER & ASSOCIATES (732) 557-4755 96
1	MR. PRINGLE: That's alright. I am
2	not a practicing professional scientist. I don't Page 86

3	pretend to be one. I don't play one on TV or in the
4	public unlike a testifier a moment or two before.
5	For the record, she was not a
6	federation plant to undermine the credibility of
7	folks that oppose us on policy issues. However, I
8	do have enough knowledge to apply to the
9	overwhelming scientific consensus over 97 percent of
10	professional climate scientists say climate change
11	is real, that human actions and inactions are a
12	major contributor and the consequences and stakes
13	from that are very, very high. It's a matter of
14	life and death and I don't say that lightly. Jobs,
15	electricity prices, the economy, disease, extreme
16	weather, you know, sea level rise, Newark Airport,
17	Long Beach Island and Atlantic City are going to be
18	under water in 100 years, unreasonable, not volatile
19	estimate, but middle of the road if they don't
20	dramatically change human action.
21	I know firsthand that's why Governor
22	Christie made some campaign commitments and comments
23	during the campaign in 2009. This is currently
24	available on a web site http://bit.ly/aJr7sG and I
25	quote. This was in, this was on his campaign web
	J.H. BUEHRER & ASSOCIATES (732) 557-4755
	97

 site, but it's not operative anymore but some folks,
 myself included, were wise enough to save that
 document. Anyway in quotes "While Jon Corzine
 signing the Global Warming responsibility and
 updating New Jersey's Energy Master Plan as strong Page 87

6 goals contained therein are laudable, implementation 7 here and a host of related issues is quite 8 disappointing. In contrast, I am committed to 9 actively pursuing these goals. My green energy plan 10 is just a hint of the kind of change I'll bring," 11 and that quote includes a link to that green energy 12 plan. 13 The opening of the Energy Master Plan, the third and fourth of this Draft, the third 14 15 and fourth sentence says, "The Administration will 16 manage energy in a manner which saves money, 17 stimulates the economy, creates jobs, protects the environment and mitigates long-term cumulative 18 19 impacts. The specific recommendations in this 2011 Energy Master Plan focus on both initiatives and 20 21 mechanisms which set forth energy policy to drive 22 the state's economy forward, but do not lose sight of the environmental protection imperatives." 23 24 That said, while there are clearly 25 some positive aspects to this draft, including the

> J.H. BUEHRER & ASSOCIATES (732) 557-4755

> > 98

1 rejection of offshore natural gas and opposition to 2 new coal, any reasonable measure of the sum changes 3 in this plan is substantially weaker than the 2008 that Governor Christie endorsed in 2009 and pledged 4 5 to be a much more aggressive implementer than Jon 6 Corzine was. It represents a 180 degree turn from that position just 20 months ago and fails to meet 7 8 the stated goals of the Draft Plan in the couple Page 88

9	sentences I just read to you and I'd like to provide
10	several examples of.
11	30 percent renewable by 2020. The
12	Governor endorsed this in 2009. He said nothing
13	about it being pie in the sky. What's changed in
14	the 20 months since to suggest otherwise? Far from
15	radical groups like the American Security Project,
16	which is bipartisan. When you look up the make-up
17	of its board it's a mainstream national security
18	group whose board members include Christy Whitman
19	and retired generals and admirals of many political
20	persuasions has said New Jersey has yet the 31
21	percent. It's not expensive. The Governor
22	comparatively the numbers contained in the 2011 plan
23	alone talk about solar being so expensive. It's a
24	dollar a month on our utility bill. The energy
25	efficiency programs and RGGI are even less than

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

99

that. People are not going to go broke because of 1 2 two dollars on their monthly bill. Industry is not 3 making a decision whether to stay in New Jersey or 4 not or whether to move or not based on their 5 equivalent of two dollars per month. There are 6 major factors that go into their energy prices. You 7 can say every dollar matters. 8 THE PRESIDENT: Are you saying that 9 the average industrial commercial facility is 10 looking at two dollars a month? 11 MR. PRINGLE: NO. I'm saying Page 89

12 extrapolating, I don't have, didn't do the math of 13 energy numbers, but I think they're equivalent of, 14 you know, obviously a large company is a lot larger than a family of four, but extrapolating some 15 equivalent to \$1.50 a month. 16 17 THE PRESIDENT: But you'd have a different view if those manufacturers and commercial 18 19 industries were paying millions? 20 MR. PRINGLE: It depends on if it's. if it's excellent. Heck, no. It's comparative. 21 22 How much are they comparing to what their net 23 profits are and what are the overall impacts. That's one of the other major criticisms of this 24 plan. It is very selective in what cost and 25

> J.H. BUEHRER & ASSOCIATES (732) 557-4755

> > 100

1 benefits it chooses to include. If you factor in 2 cancer and emphysema and asthma, you get very 3 different answers when it comes to even natural gas 4 let alone coal and it's great this plan says no more 5 coal. However, there are policies contained in here 6 that will mean more quote, "it's generated in 7 Pennsylvania and imported through power lines." It's always very selective. 8 9 THE PRESIDENT: Back up 'cause you 10 need to go slower for the court reporter, also for what policies incentive advises coal? 11 me. 12 MR. PRINGLE: The BPU. This was 13 a -- I forget my acronyms. I know this was 14 something where the BPU agreed with us to oppose Page 90

15 PSE&G's request to sell power to New York City, which would mean they argue we therefore need to see 16 17 subsequent increase in power lines. THE PRESIDENT: I'm not sure that 18 19 was the different issue about a transmission like I 20 think from New Jersey to New York. We oppose it, 21 but I don't think that has that's a FERC decision, 22 not a BPU decision. We are trying to fight as hard 23 as we can. Is there anything --24 MR. PRINGLE: The fact that we're 25 exporting power of New York City, one of the

#### J.H. BUEHRER & ASSOCIATES (732) 557-4755

101

1	arguments for needing power lines we have these
2	gaps. Having those gaps is if to the degree we have
3	gaps we just wait by shipping our stuff to New York.
4	THE PRESIDENT: I'm just asking a
5	question, really simple question. I know if you
6	could back up a little bit, maybe slow down. You
7	said things in the Master Plan are encouraging coal,
8	not discouraging coal. What in the Master Plan are
9	anything we've done encourages, not discourages
10	coal? Because I think if I read the LCAT report,
11	right and every other evidence I've ever seen that,
12	for example, gas-fired generation would displace
13	coal and having a net positive environmental impact.
14	Is there anything in here that does the opposite,
15	encourages coal?
16	MR. PRINGLE: By dropping from 30
17	percent to 20 percent on renewable, by dropping from Page 91

20 to 17 percent on energy efficiency, by not 18 19 aggressively having energy efficient policies 20 contained therein, you're creating gaps and the 21 easiest, fastest, cheapest way to close that gap is 22 going to be coal from Pennsylvania. 23 THE PRESIDENT: Are any of those 24 ceilings? Are they all floors that you're 25 mentioning? In other words, we could hit 30, 40, 50

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

102

1 if --2 MR. PRINGLE: Sure. And there's also knowing, there's also knowing you could also go 3 below 17. I mean these are goals. That's one of 4 5 the arguments. That's one of our --THE PRESIDENT: Slow down. 6 Just 7 really simple questions. Those goals that you're 8 talking about, are they ceilings or floors? A floor 9 is different than you can't go below a floor if you 10 set it. MR. PRINGLE: I would argue they are 11 12 neither. They're goals. They're -- I don't believe 13 even these numbers are strong enough to suggest they're the floor. We'd love for it to be a floor 14 15 and we'd love for there to be a concerted effort to 16 blow it out of the water, whether it was 22 and a 17 half percent or 30 percent. So we don't see that, 18 we don't see either in the red or in the substance packing up this plan a concerted effort to blow it 19 20 out of the water.

THE PRESIDENT: Well, okay. So if we say specifically calling it a floor, you might have a different view. I mean, I think I've said that in all the public hearings, but maybe not. MR. PRINGLE: What would I rather it

> J.H. BUEHRER & ASSOCIATES (732) 557-4755

> > 103

	103
1	be 22 and a half percent vague or clearly saying 22
2	and a half percent is the floor. Yeah, I'd rather
3	the latter, but I would suggest that that is a false
4	choice and that we should be having more aggressive
5	goal, have policies contained in here that were much
6	more aggressive in getting there and going beyond
7	it.
8	THE PRESIDENT: Go ahead. I'm
9	sorry.
10	MR. PRINGLE: Going back to the 30
11	percent and all of the costs and benefits, I think
12	if you look at the cost benefit, didn't look at the
13	jobs that are being created, solar market that's
14	better on the offshore wind side through that
15	legislation and that's certainly a positive folks
16	are looking at.
17	The primary arguments I have heard
18	against the changes that we would call a weakening
19	from the 2008 plan, putting aside the fact that the
20	Governor endorsed the 2008 plan, is economics and
21	jobs and the like, and we don't see the economic
22	analysis here that on solar in a New Jersey energy
23	efficiency that recognizes the return on investment Page 93

107

24 the jobs that created that would to the degree there 25 are additional costs to the ratepayer how those are

> J.H. BUEHRER & ASSOCIATES (732) 557-4755

> > 104

1 balanced by those additional economic benefits. I 2 would say on the offshore wind side that is done, 3 but that was done, you know, in coordination with 4 the legislature and the Administration. If you 5 provided the same rigor to solar and efficiency that 6 you did to wind, I think you would have much better 7 policies in this plan on solar and efficiency. For 8 example, the plan talks about cost saving. The 9 benefit savings isn't the kilowatt hour, but fewer 10 kilowatt hours, that's efficiency and conservation. 11 we could be doing light years more on building 12 codes, compacting development and citing standards 13 in terms of having passive solar, you know, more, 14 not just self facing houses, but windows on the 15 south side, not on the north side, insulation where 16 how many, what kind of windows, even trees. Having 17 trees on the south facing side of your house does 18 tremendous savings to your electric bill and to your 19 electric needs in terms both on cooling and heating. 20 And there's an uneven playing field. I mean the natural gas of three gas 21 22 plants, one is absolutely in Ironbound. I tried to get a hold of Ana Baptiste from the Ironbound 23 24 community while Nicky was up here to get the exact 25 location. I wasn't able to. I believe it's awfully

#### 082411\_Transcripts J.H. BUEHRER & ASSOCIATES (732) 557-4755

1 close to the incinerator, but we'll get that to you. 2 I believe it's in the area. THE PRESIDENT: I think you're right 3 4 in terms of the description. I mean just we have 5 the address. MR. PRINGLE: And related to that, 6 7 Nicky is dead on when he says this is going to be an 8 additional cumulative impact and we hear about how 9 these dirty outfits are going to close. We also 10 heard in 1974 when the Clean Air Act passed that all 11 these coal plants were going to be gone in ten 12 years. Well, it's 40 years later and we're still breathing that air and dying because of it and that 13 14 was a guarantee. It didn't happen. There's no quarantee in here. I specifically asked for it. 15 16 THE PRESIDENT: I promise if I ever 17 give you a guarantee it will happen. I promise. 18 MR. PRINGLE: All right. 19 THE PRESIDENT: If I ever, ever, 20 ever give you a guarantee. 21 MR. PRINGLE: And we love the 22 repeated comments you've made, Mr. President, at earlier this hearing and several others concerning 23 the proposed coal plant in Linden, but the fact 24 25 remains there is a permit sitting at DEP that DEP is

> J.H. BUEHRER & ASSOCIATES (732) 557-4755

> > 106

105

082411\_Transcripts spending time and money reviewing. So you can say 1 2 it isn't going to happen but, you know, PurGen 3 doesn't believe it's dead yet. The Linden Mayor 4 doesn't believe it's dead yet. They are spending 5 money on them. You might want to, while their Boards of Directors and shareholders might want to 6 7 ask that company why they are spending money on a 8 plant, and lobbyists and lawyers on a plant that 9 ain't ever going to happen. 10 THE PRESIDENT: Sure. 11 MR. PRINGLE: I'm confident that we 12 feel much better with those comments and we're 13 confident that Commissioner Mardin and Governor 14 Christie remain adamantly opposed to that coal 15 plant, but saying it and it happening, you know, can be two different things and, again, that's still 16 17 relatively speaking as horrible a plant that is that in and of itself is a tiny fraction of the concerns 18 19 of the overall plan. That said it's a very 20 important indicator because one of the reasons that 21 industry is investing so much in PurGen is they see 22 it as -- first PurGen is part of the Susquehanna 23 Roseland Transmission Line. So it's very important 24 to nip that in the bud. We appreciate your 25 leadership in hopefully making that happen, in the

#### J.H. BUEHRER & ASSOCIATES (732) 557-4755

107

process of making that happen. We also share in the
 concerns about waste energy and I know you better
 from your freeholder days. I was frankly shocked to

082411\_Transcripts see that back in there. That came out of left 4 field. It's ridiculous. The best way to manage our 5 trash is to prevent -- is to produce as little as 6 7 possible, to compost it, to source reduce, to 8 recycle and when you do that the stuff that's left over isn't burnable and so, you know, it's a false 9 10 choice. If we have this trash what do we do with 11 it? That's not the right answer. We shouldn't have 12 trash. It's a resource. No. It's a waste. The 13 resource 'cause we did the wrong thing in the first 14 place. So that should get mixed first immediately. 15 THE PRESIDENT: Is there any thought 16 what we do with other waste separate and apart from 17 the trash you put out on the street? MR. PRINGLE: Very fair question. 18 It depends on why it exists. One of the slippery 19 20 slopes here is the sooner you come up with this great thing you can do with garbage, you just create 21 22 a massive incentive to have less garbage in the 23 first place. So, if it's a quickly renewable 24 resource like switch grass where you are planting 25 it, storing carbon, it burn, you can burn it in a

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

108

1 way that you're not, you know, you look at the life 2 cycle of that switch grass. Excuse me. Something 3 like that is a very viable biomass energy solution. 4 And the book that I am going to give to you once you 5 give me that money, I haven't given you the dollar 6 amount 'cause I know you can't take gifts, that

	082411_Transcripts
7	demonstrate how we can rely on technology like that,
8	and that's a very viable alternative. However, if
9	it's tires, you know, that's not that burns a lot
10	dirtier than switch grass and it's creating it.
11	It's a different option and it's creating an
12	incentive to not manage tires better in the first
13	place. So depending what the fuel stock is, is
14	there really no other alternative than that fuel
15	stock and how clean or dirty is that fuel stock are
16	the kinds of questions you need to be looking at,
17	which is why we'd say no to garbage, no to tires,
18	yes to switch grass and it needs to be cost
19	effective, which is something like corn doesn't work
20	for those who don't know it. You use more energy
21	producing the ethanol than you get from burning it.
22	Lost my points. I think I'm just about done. Here
23	we go.
24	This is tough to measure but

This is tough to measure, butI have about one or two more points. Just going

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

109

1	back to the cost benefit, we talked about the health
2	care associated with fossil fuels and all that.
3	There's also economic cost. Besides the cost of
4	that, health care, the sick days and absences from
5	school and work because you're sick or you're home
6	taking care of a loved one. That has very real
7	economic consequences that need to get factored in
8	to your question on how do you pay for it. First
9	you stop rating funds that are obligated to fund

082411\_Transcripts these programs, whether it be RGGI or society 10 11 benefits, charge clean energy, whatever. Everything has a cost and unless you're going to truly reflect 12 13 the cost of Newark's being insured by taxpayers or 14 all of the health care costs and all that associated with coal and natural gas, you know, we shouldn't be 15 16 talking about a dollar a month for solar being a 17 deal breaker when all these other things, when we're talking about a billion dollars per gas for three 18 gas plants. And that's one of the very reasons we 19 20 know it's not in here. We know there's serious talk 21 about turning the clean energy program into a 22 revolving fund. That will be a drastic cut. That's 23 basically eliminating funding for energy efficiency 24 and stimulating the kinds of clean energy and green 25 jobs that supposedly we want in this state. If your

#### J.H. BUEHRER & ASSOCIATES (732) 557-4755

110

balance is the environment, the economy, well, the best way to avoid having to, the best way to not have to do that balance is choose policies that are good for both and, again, we think that that plan is lacking in that regard.

6 So these are, just wrapping up, 7 these are obviously complex problems, the economic 8 and health impacts, climate change, sea level rise, 9 but this plan for better or worse will play a very 10 important role in either aggravating or alleviating 11 these problems. And we can say it's a national or 12 international problem or whatever, but somebody has

082411\_Transcripts got to lead and regardless of whether you think New 13 14 Jersey can or can't make a difference on climate 15 change, we obviously think it can. All the other 16 ancillary benefits, the clean air, the jobs and all 17 clearly have direct New Jersey benefits. So, you know, this plan can live up to the stated intent, 18 19 can live up to the Governor's comment 20 months ago 20 to shoot for the stars and have the rhetoric and 21 match that rhetoric with action. And you are 22 obviously the key decision makers or we can put the 23 proverbial head in the sand and ignore the overwhelming scientific consensus and be much more 24 25 aggressive here. And it's our position again that

## J.H. BUEHRER & ASSOCIATES (732) 557-4755

111

1 is currently drafting the plan is too close to the 2 latter. I mean not enough, not close to the former 3 and urge you to move in that direction. We 4 obviously know we're not going to get everything we 5 want, but we think the plan can and should get a lot 6 stronger than its current form. Thank you. 7 THE PRESIDENT: Thank you, David. 8 Miss Sims, I see that you spoke at a 9 previous hearing. Do you have something else to add 10 to what you already said? I have, we have pretty 11 much said we're not going to entertain speakers for 12 the second time. I guess a lot of people were 13 discouraged because of that. Do you have something to add to what you already said? 14 15 MS. SIMS: Well, I was just going to

082411\_Transcripts 16 say a few other points. THE PRESIDENT: In addition to what 17 18 you already said? 19 MS. SIMS: Yes. 20 THE PRESIDENT: So you have different points? 21 22 MS. SIMS: Yes, different points. 23 THE PRESIDENT: All right. Try to be brief. You could always submit written comments 24 25 to supplement your original comments, but okay. I J.H. BUEHRER & ASSOCIATES (732) 557-4755 112 will probably take a --1 2 MS. SIMS: I'll be brief. 3 THE PRESIDENT: You have to come up. 4 If there's anything anybody intends to speak, I 5 don't have their card. This will be our last 6 speaker. 7 MS. SIMS: Cathy Sims. Okay. I 8 just wanted to make a couple of brief points. One, about the levelized costs of the energies which were 9 listed on one of the pages in the Master Plan. We 10 11 believe that the levelized cost for solar was twice 12 as much as was stated in, twice as much as it really 13 is. Now, I think you said you had all data for 14 that. 15 The other thing is the cost of

nuclear is probably about five times the cost that
was stated in there and because it wasn't considered
the thousands of years of monitoring the waste and

082411\_Transcripts 19 so forth. 20 And the other thing, statement that 21 was recently put out by Paul Gunther who is the 22 Director of Beyond Nuclear, a watchdog group, noted 23 that nuclear energy becomes a liability during 24 disaster. We know there's a possibility of a 25 hurricane coming here. I'm sure everybody heard

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

113

1 about the earthquake yesterday. If they didn't feel 2 it they knew that the epicenter was within five miles or so of a couple of nuclear plants and it did 3 4 take them offline. They were relying on backup 5 power. One of the four generators failed to work. 6 They only needed two. Fortunately, they got back on 7 regular power today, I understand, but they were, 8 there's a possibility that there could have been 9 some kind of, you know, hurricane coming that way at 10 the same time and could have been a much worse 11 disaster, maybe like Fukushima. Who knows? So 12 that's all I have to say on that issue. 13 As far as where the money is going 14 to come from to fund solar and energy efficiency, I 15 like the idea of guaranteed loan programs. I know 16 Obama put out a proposal for guaranteed solar or nuclear loan programs. Why not switch that over to 17 18 guaranteed solar and energy efficiency and other 19 claimed renewable energies? Somebody a while back in the financial industry said what about floating a 20 21 bond to pay for some of these programs, and we do

22	have a solar energy industry in New Jersey that is
23	able and ready. They have already surpassed the
24	current RPS, which is why the SREC market dropped.
25	So they're able to do that. We're able to do much

# J.H. BUEHRER & ASSOCIATES (732) 557-4755

114

1 more than RPS and it's just a matter of if we can 2 put the promotion and support behind it. There's 3 thousands of people looking for work, that would 4 work in the solar industry and help New Jersey 5 become a much better place to live, that's it. 6 THE PRESIDENT: Thank you. That concludes our, should be our 7 8 second, but is now our last Energy Master Plan 9 Public Hearing. As I mentioned, we will review 10 these, this testimony, written comments. We are 11 waiting for our various subcommittees to report back 12 to us on methods of implementation. That probably 13 will be some caucus meeting and public hearing at 14 least on those reports. And then finalize the Master Plan, but I can't give you a target date 15 16 here. So thank you all very much. That concludes 17 the public hearing. 18 (Deposition concluded 4:00 P.M.) \* \* \* 19 20 21 22 23 24

J.H. BUEHRER & ASSOCIATES (732) 557-4755

115

1 CERTIFICATE 2 3 4 I, COLLEEN M. VAUGHN, a Certified 5 Court Reporter and Notary Public of the State of New 6 Jersey, do hereby certify that the foregoing is a 7 true and accurate Computerized Transcript of the 8 proceedings as taken stenographically by and before 9 me at the time, place and on the date hereinbefore 10 set forth. 11 12 13 COLLEEN M. VAUGHN, C.C.R., C.C.T. 14 15 16 17 Dated: 8/24/11 My Commission Expires on February 26, 2016 18 Certificate No. 30XI00124100 19 20 21 22 23 24 25

> J.H. BUEHRER & ASSOCIATES (732) 557-4755