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DRAFT 2009 NYS ENERGY PLAN

PUBLIC HEARING

Date: September 24, 2009

Time: 4:00 p.m.

Location: Lecture Center 100
One Hawk Drive
New Paltz, New York

Before: Thomas Congdon, Chair
NYS Energy Planning Board

Robert Callender,
NYS Energy Research and
Development Authority

Judy Lee,
NYS Department of Public Service

William Little, NYS Department
of Environmental Conservation

Stanley Gee,
NYS Department of Health

Judith Enck,
Deputy Secretary for the Environment

1 MR. CONGDON: My name is Tom Congdon, the
2 Chair of the New York State Energy Planning Board. I
3 would like to welcome you all to our eighth public
4 statement hearing on the draft State Energy Plan.

5 I would like to thank the other members of
6 the planning board here with me today. At the far end
7 is Bob Callender, Vice President of Programs at NYSERDA;
8 Bill Little, from the Department of Environmental
9 Conservation; Judy Enck, Assistant Secretary, Deputy
10 Secretary for the Environment; Judy Lee, who is the
11 Deputy Commissioner at the Public Service Commission,
12 and I am Tom Congdon, again, I'm the Deputy Secretary
13 for Energy and Chair of the State Energy Board.

14 For the past year and a half, the planning
15 board has worked with staffs of 10 agencies and public
16 authorities to develop the draft State Energy Plan.

17 The planning process commenced in April of
18 2008 when Governor Paterson issued Executive Order
19 Number 2, which created the Planning Board and charged
20 us with developing the draft plan.

21 On August 10th, the planning board released
22 the draft plan on its website, www.nysenergyplan.com,
23 and we commenced a 60 day written comment period and
24 began the public hearing phase of developing our final

1 plan.

2 Written comments are due by October 19th and
3 we will release the final plan by the end of the year.

4 The Plan's objectives are to ensure our
5 energy systems are reliable for a 10-year planning
6 forecast; to reduce greenhouse gas emissions; to
7 stabilize energy costs and improve economic
8 competitiveness in the State of New York; to reduce
9 public health and environmental risks associated with
10 energy systems; and to improve the state's energy
11 security.

12 The plan modeled and considered various
13 approaches to achieving these objectives and we have
14 arrived at a number of strategies.

15 First and foremost, the plan identified
16 energy efficiency is clearly a priority resource to
17 meeting our multiple objectives.

18 Second, the plan seeks to develop in-state
19 energy resources, largely renewable resources, and also
20 in-state natural gas resources, in an environmentally
21 responsible manner.

22 Third, the plan projects infrastructure needs
23 both to support the clean energy technology of the
24 future, and also, to ensure reliability.

1 Fourth, the plan identifies opportunities to
2 capitalize on existing academic and research strengths
3 in the state, and to facilitate connections between
4 academia and industry to speed the rate of innovation in
5 energy technologies.

6 The plan also identifies needs for clean
7 energy workforce training and economic development
8 strategies to help the existing energy businesses thrive
9 in a carbon constrained economy.

10 Lastly, the plan recognizes that none of this
11 can be fully achieved without working with other levels
12 of government and communities to achieve our goals.

13 The public hearing today is an example of our
14 desire to work with, and learn from, the community and
15 stakeholders affected by energy decisions and policies.

16 This is one of nine public hearing sessions
17 we are holding around the state to hear your comments,
18 and our full hearing schedule is available on our
19 website. The final hearing is Saturday in Utica.

20 My job here today is to gather information
21 for the planning board to consider. Again, we are very
22 appreciative of your attendance.

23 The process is very simple. Those who want
24 to comment have been asked to sign in. Your name will

1 be called one at a time to speak. Please come to the
2 microphone and speak directly into the mic.

3 A court reporter is here to prepare a
4 verbatim transcript, and it is very important that there
5 be only one speaker at a time. Please make an effort to
6 speak clearly and slowly. It is also very important
7 that those in attendance be courteous to the speakers so
8 his or her comments can be transcribed accurately.

9 If you happen to have a written version of
10 your comments, please provide one to the court reporter
11 and she can use that to further ensure that your
12 comments are transcribed accurately.

13 All speakers are asked to focus on issues
14 that pertain to the draft energy plan. Your comments
15 should be as succinct as possible so that we can hear
16 from as many of you as possible.

17 To that end, we have set a five-minute
18 deadline, and our colleague, John, is here with a timer,
19 and that's going to beep after five minutes is up, and
20 when you hear the beep if you can please wrap up your
21 comments, that would be greatly appreciated.

22 Formal presentations, like Power Point,
23 aren't allowed. Those who want to comment but do not
24 want to speak publicly, or do not get a chance to do so,

1 can also submit written comments via the State Energy
2 Plan website. If you decide to submit written comments,
3 please do so as soon as possible so they can be
4 carefully considered.

5 All public comments, whether stated at a
6 hearing like this one or sent to our website, will be
7 reported to the Energy Planning Board for its
8 consideration. They all count equally regardless of how
9 they were received.

10 So, before I call the first speaker, does
11 anyone have any questions about the process?

12 Excellent, so, let us begin. Our first
13 speaker today is Tom West from the West Law Firm.

14 MR. WEST: Thank you very much, Tom. I
15 submitted full comments to the court reporter and I have
16 got an abridged version to read today. We believe some
17 of these messages are important enough to deliver
18 personally.

19 I'm here today on behalf of Chesapeake Energy
20 Corporation to talk about the economic impact that
21 natural gas exploration can have, and has had, on states
22 and communities across the United States, just like New
23 York, and more particularly, the Southern Tier.

24 But before we get to the Southern Tier, let's

1 take a wider perspective and look at this nation's
2 energy and environmental landscape. We enjoy a quality
3 of life in this country that involves convenience,
4 comfort and prosperity, and energy is a primary
5 ingredient.

6 But concerns about carbon emissions, global
7 warming, and scarce resources mean that lawmakers must
8 strike a balance between affordably protecting our way
9 of life and sensibly protecting our environment.

10 Natural gas is the answer. It is clean. It
11 is the lightest hydrocarbon on the planet, emitting
12 roughly half the carbon emissions of coal.

13 It is abundant. Record new supplies of
14 natural gas have recently been discovered and technology
15 has unlocked the production of unconventional shale gas.

16 It is affordable. Natural gas power plants
17 are faster and less costly to build than coal fired
18 power plants.

19 And it's American. It's found right here in
20 New York State. The result is a treasure chest of new
21 natural gas resources in North America, which can
22 reshape the way we address energy and climate challenges
23 in this country.

24 For those of you who do not know, Chesapeake

1 Energy Corporation is one of the largest producers of
2 clean burning natural gas in the country. Chesapeake is
3 the largest leasehold owner in the Marcellus shale,
4 which stretches from New York to West Virginia, as well
5 as the number one developer of shale gas in America.

6 In the State of New York alone, Chesapeake
7 has an estimated one million acres under lease for
8 Marcellus shale and other prospective formations. The
9 Marcellus shale formation may well prove to be one of
10 the largest deposits of natural gas in the nation's
11 history. Indeed, Penn State University has recently
12 found that the Marcellus shale region of the
13 Appalachians could yield seven times as much natural gas
14 as originally estimated.

15 Approximately a yield of up to as much as 500
16 trillion cubic feet of natural gas, which in turn, would
17 mean an ability to meet the entire nation's natural gas
18 need for approximately 14 years.

19 Now I would like to turn to economic
20 opportunities presented by Marcellus shale. Shale
21 exploration is happening across the country. A recent
22 study by Navigant, an independent engineering and
23 consulting firm, reports that shale plays, such as the
24 Marcellus shale, are prolific enough to significantly

1 reduce our country's reliance on foreign oil, reduce
2 gasoline prices and reduce pollution caused by
3 automobiles by up to 50 percent.

4 As a result, New York is now uniquely
5 positioned to help both America and itself reduce our
6 reliance on foreign energy and stimulate the state's
7 economy at the same time. While there is currently no
8 Marcellus shale development in New York due to
9 regulatory constraints, we can look to other Marcellus
10 shale development in Pennsylvania as a model for future
11 investment.

12 An exhaustive study completed in July at Penn
13 State University provides us with specific economic
14 impacts that arise from shale gas exploration and
15 production.

16 First, let's look at job creation. Today and
17 in the years to come New York, and as the nation fights
18 to stay out of recession, there is no substitute for an
19 industry that will create jobs. This industry will
20 create thousands of jobs.

21 While most domestic industries have seen jobs
22 disappear with technological advancements, the natural
23 gas industry has proven to do quite the opposite. As
24 technology has improved, and allowed us to explore with

1 a reduced environmental footprint, more American jobs
2 have been created.

3 Chesapeake expects the same in New York,
4 where we can do this while protecting the environment,
5 typically the fresh water sources. Economic prosperity
6 will create many good jobs in a region of the state that
7 is today highly economically challenged.

8 The natural gas industry needs every level of
9 employment from good, traditional blue collar jobs, such
10 as well tenders and drillers; to high tech jobs, such as
11 seismic analysts, geographic information system
12 analysts, and geophysicists. And the industry is one
13 that benefits a multitude of Americans and American
14 industries right here from American soil.

15 The current and projected experience in
16 Pennsylvania proves this. According to Penn State's
17 study in 2009, 48,000 jobs will be created in
18 Pennsylvania and 175,000 jobs by the year 2020.

19 I know my time is up so I will just sum up.
20 We have submitted written comments.

21 I would just like to reiterate that natural
22 gas is abundant, clean and affordable and is right here
23 in New York State. And we believe that the Marcellus
24 shale development in New York State can and will have a

1 dramatic impact on New York's energy future.

2 Thank you.

3 MR. CONGDON: Thank you, Mr. West.

4 We are pleased to be joined by Assemblyman
5 Kevin Cahill. We are also joined by one of our board
6 members, Stanley Gee, Acting Commissioner of the
7 Department of Transportation.

8 Our next speaker is Assemblyman Kevin Cahill,
9 the Chair of the Energy Committee in the Assembly, and
10 he's been a terrific partner in advancing the clean
11 energy in the State. It's been a tremendously
12 productive legislative session, that's at least for key
13 initiatives that help along the energy plan, including
14 making the energy planning process statutory.

15 So, thank you very much for being here.

16 ASSEMBLYMAN CAHILL: Thank you very much,
17 Tom.

18 Having just come back from two days of
19 hearings in Western New York, and chiding every witness
20 not to read from their notes, you will be pleased to
21 note that my notes have not yet arrived so I can't read
22 from them. I will be submitting to you written comments
23 to back up what I'm here to say today.

24 I just came, really, to extend a few very

1 general words. My written comments expand upon them and
2 we are prepared in the future to provide more detailed
3 information about it.

4 First and foremost, I would like to thank you
5 and the members of the panel, the agencies who have
6 gotten together to put the draft plan together. It is a
7 remarkable step by New York. It puts us in the
8 forefront of all 50 states in energy planning, and it
9 provides the framework and the foundation for what the
10 Governor signed last week, our statutory energy planning
11 process.

12 That process will provide a context for
13 making all energy decisions into New York State into the
14 foreseeable future. It will give us a blueprint to work
15 from and will allow us to make decisions in an
16 intelligent, contextual way, in a way that no other
17 states and many, many nations, most nations save three,
18 are not able to do.

19 There are many important aspects to the plan
20 that's been proposed as the draft. There are many
21 points that we would like to perhaps ask you to pay more
22 attention to in the course of the next several weeks as
23 you work your way toward a final plan.

24 But I would be remiss if I did not make this

1 the emphasis of my statement. My thanks and
2 congratulations to the panel and particularly for you,
3 Tom Congdon, as the Deputy Secretary to the Governor,
4 for advancing so many important energy initiatives this
5 year, and energy planning being foremost among them.

6 Not only did you advance this plan but you
7 were critical in seeing that the legislation made it to
8 the Governor's desk and secured his signature. So,
9 thank you very much.

10 Now to the other part. I brought my own
11 notes, but Connor, who should be walking in at any
12 minute, has the actual notes.

13 It's important to note also that many of the
14 recommendations in the draft proposal cover ground
15 that's already been plowed by the State of New York. We
16 have already gotten a good start on energy planning.
17 This isn't just a document that says, let's do this in
18 the future and making it very esoteric. It actually
19 takes advantage of some of the many things that were
20 done already.

21 For example, we have put our Green Jobs/Green
22 NY proposal; the NYPA efficiency financing proposal; OGS
23 alternative fuel procurement for green buildings; net
24 metering; transmission intervenor funds;

1 universal/industrial partnerships, and green workforce
2 development.

3 On those latter two points let me plug a
4 commercial here for the Hudson Valley and Solar Energy
5 Consortium for all the good work they are trying to do
6 to make the Hudson Valley a hub of solar research and
7 development and also manufacturing and distribution.

8 The assistance of the State of New York is
9 critical to that effort for us to transform our local
10 economy, and we believe it's critical for the
11 transformation of our local economy to transform the
12 larger economy of New York State and make us a leader.

13 Some very specific things. I know John is
14 keeping time here so I'm going to be very, very brief.

15 I would like to see the draft plan include
16 better guidelines and timelines for the implementation
17 for the recommendations. I know that they will be
18 included in the final plan. I wish that there was an
19 opportunity for public input on those guidelines because
20 I think the public would have a great deal to say about
21 them.

22 Energy efficiency and distributed generation,
23 we have many programs in New York State that contribute
24 to those two goals. The SBC, the RPS, the EEPS and RGGI

1 should all be made permanent, they should be made
2 statutory, and they should be brought on budget.

3 The innovative energy efficiency mechanisms
4 in Green Jobs/Green NY can really go a long, long way,
5 and we urge this panel to support and get the signature
6 of the Governor on that law. I know with the Governor's
7 great help and partnership in developing that
8 legislation, the odds are very good that he will do so.

9 I think we have to improve our net metering
10 laws, but we have a good, strong foundation in that
11 regard. And I thank you once again for the Governor's
12 energy apparatus and all that you are doing to make sure
13 that we can come to some sort of way where we can make
14 our net metering laws the best and the most useful in
15 the nation. Thank you very much.

16 Energy planning codes, energy codes. We are
17 working very closely with the Governor's office to
18 expand our energy code, and we think that it's important
19 that we do so as soon as possible and that we not rest
20 once we do so. That we take advantage of the fact that
21 this is an evolving area and we continue to try to
22 improve upon the energy code in the State of New York.

23 We must do so in such a way that does not add
24 to the cost of building or cost to consumers in the

1 State of New York unnecessarily and in a way that
2 doesn't allow them to recover those costs.

3 The last speaker, speaking of Marcellus
4 shale, I think it was brave and very important that you
5 included Marcellus shale in the draft plan. In fact,
6 Marcellus shale is one of the lynchpins to energy
7 independence for New York.

8 And I think we need energy independence in
9 New York and we are positioned better than any state in
10 the union to achieve energy independence, partially
11 because of this plan, partially because of the presence
12 of Marcellus shale gas, and partially because of our
13 forward leadership in the area of renewable energy.

14 We use -- the New York State consumers enjoy
15 three times the national average of renewable energy.
16 We are the most energy efficient people in the nation,
17 and we could be more so. I think the idea of having a
18 goal of 45 by 15 is laudable, but I think it could also
19 be included in a larger goal of creating energy
20 independence.

21 Not only will that give us leadership in the
22 nation, but it will also provide for the security of
23 this state; and in the event of a situation like we
24 faced last year, insulate us from what happened across

1 this country when energy spiked across the world.

2 We can become energy independent. Marcellus
3 shale is critical to that. We should also remember that
4 the environmentally sound extraction of natural gas in
5 New York State is something that we would all support
6 and, in fact, insist upon.

7 And I would urge those that would oppose
8 further discussion of this to remember that we are using
9 a significant amount of natural gas -- 95 percent of our
10 natural gas comes from other states where it is not
11 necessarily extracted in an environmentally sound way.

12 We, as New Yorkers, should not leave our
13 environmental bona fides at the state line. We have an
14 obligation to do this and we will do it in a responsible
15 way.

16 I know that the DEC has almost completed the
17 regulations and the review of the Marcellus shale
18 extraction, and upon the completion of that review I am
19 confident that we will be able to move forward in that
20 regard and bring us one step closer to energy
21 independence.

22 Just touching on the other subjects very
23 quickly, because I heard John's preliminary beeper go
24 off.

1 Transmission and distribution, very important
2 issue is the distribution system in New York State will
3 determine the future of renewable energy and we should
4 keep that in mind in our energy planning goal. Our
5 energy planning laws should reflect that and our energy
6 plan should reflect that.

7 Nuclear is a very significant issue. I would
8 like to have it expanded upon in my remarks in written
9 comments about nuclear. In brief, we must be very
10 careful in proceeding with the movement toward returning
11 to nuclear technology.

12 Cost, environmental health, safety, long term
13 storage, a number of issues are not resolved now and
14 have not been resolved since I sat in this very room
15 taking courses on that subject 32 years ago. It's a
16 long road to go and we should make sure that we are very
17 cautious in that regard.

18 And the same goes for carbon capture and
19 sequestration. That is not a science that is perfected
20 to the point where we should be investing dollars that
21 could be better used for such things as carbon reduction
22 in other areas, and better used for renewable and
23 alternative energy sources.

24 University/industrial partnerships, I already

1 discussed. Environmental justice, the emphasis in the
2 plan is very important, and I think these policies are
3 long overdue in New York State.

4 One other critical area is transportation and
5 smart growth initiatives. What makes us the most energy
6 efficient state in the nation is not that we are so good
7 and frugal about turning off the lights when we leave
8 the room, but that we have the best mass transit system
9 that serves half the residents in New York State; that
10 the largest urban center in New York State was fairly
11 well planned from the start, and we must return to that
12 sort of thinking and return to the pre-Robert Moses
13 thinking of creating cities and villages, and creating
14 smart growth patterns across New York State and then
15 creating transportation systems that link those
16 communities together, so that we are once again one
17 great New York State.

18 If we do that and this plan plays a role in
19 that, then we will all be able to pat ourselves on the
20 back and tell our grandchildren that we participated in
21 making us, once again, the Empire State for the 21st
22 century.

23 So, thank you very much.

24 MR. CONGDON: Thank you very much.

1 Our next speaker is Ron Kamen from Earthkind
2 Energy.

3 MR. KAMEN: Thanks, Tom, and thank all of
4 you. At the end of a long process, I want to
5 congratulate you all on a tremendous achievement. I
6 know how much time, effort and energy you guys put into
7 this. It was pretty incredible.

8 My name is Ron Kamen. I am Senior Vice
9 President of Earthkind Solar, the state's leading solar
10 thermal technology supplier who, with our joint venture
11 partner, now have 40,000 solar systems installed
12 worldwide.

13 I'm also the President of New York Solar
14 Energy Industries Association, NYSEIA, which has 191
15 members across the state and we are working to build a
16 solar economy.

17 And as per my remarks in Albany, I won't
18 repeat or read this and I'll leave my formal statements,
19 but first, excellent job. You guys basically touched on
20 everything. It's pretty amazing. In my 30 some odd
21 years involved with state government I don't believe
22 I've ever seen a more dedicated group of individuals
23 working together as public servants to actually put in
24 place public policies that I believe can set the stage

1 for the next century.

2 Looking at the next century and looking first
3 back at the last century, I just do want to recall again
4 that 19 percent of our renewable energy goal right now
5 is being met by hydro. And that was investment last
6 century that the taxpayers and consumers of New York
7 State made to own long term renewable energy generation.

8 The cheapest source of power in the state is
9 what power for jobs provides, it's 19 percent of the
10 first 25 percent goal, 30 percent of our renewable
11 energy goal is, and a great benefit that is, as every
12 other price went up, that hydropower provides a fixed
13 price energy resource that never increases. And we own
14 it.

15 That's one of the things that I believe the
16 state needs to take a look at as we go forward is how we
17 as taxpayers and consumers can own these resources and
18 gain those long term benefits. While it costs us more
19 up front, in the long term that's where we are going to
20 see the tremendous opportunities and tremendous savings
21 that will occur. As oil, gas and other sources of
22 energy continue to rise, these fixed priced renewable
23 energy resources stay here and will have long term
24 benefits and help as well with the environmental.

1 In terms of the plan, you guys have heard me
2 talk before about thermal. More than half the energy in
3 the state is used to provide heat and hot water. In New
4 York City, the densest concentration of electric power
5 in the world, still the majority of energy in buildings
6 in New York City is for heat and hot water. When you
7 get outside of New York City the thermal component
8 becomes even larger.

9 In all the plans, in all the proposals, we
10 always focus in on electricity for a lot of different
11 reasons, but clearly, thermal provides a clearer path
12 towards energy independence, towards reducing carbon
13 emissions, towards price competitive supply, and towards
14 customers sited and on site sources of energy. That's
15 one we need to focus on.

16 We urge the state to put forth an aggressive
17 goal of 2000 megawatts of solar electric PV by 2020. We
18 think it's achievable. We think that over the next ten
19 years solar electric PV will achieve grid parity. We
20 need to have a unified plan about how to get there and
21 how to achieve those goals.

22 When you look at nuclear and the costs that
23 have gone into nuclear, and compare that to the cost of,
24 even today, providing solar electricity, an equal amount

1 of solar electricity is clearly an economic benefit.
2 While some look at it as costly, in the long term it's a
3 tremendous benefit to the state.

4 And of course, the same is even more true of
5 solar thermal technologies, which are four times more
6 cost effective currently than solar electric
7 technologies, and they are an underutilized resource.

8 In addition, as you guys look to set your
9 goals and set standards that we believe at this turn of
10 the millennium is setting the opportunity for the next
11 century, our ultimate goal really needs to be net zero
12 energy buildings.

13 One of the leading examples here in the
14 Hudson Valley -- and I think you'll hear from Jeff
15 Irish, Hudson Valley Clean Energy -- is where a
16 commercial office building has a combined geothermal,
17 solar thermal, solar electric system in an energy
18 efficient building that has net zero energy.

19 It's here. It's now. It's doable. It's
20 achievable. And we can all have it if we decide that's
21 our goal and that's what we want to achieve.

22 So, I guess the four basic things I want to
23 put forth is when we look around the world we see
24 Germany as a shining example. Less solar resource than

1 New York State, equal sun to Juneau, Alaska, 25 percent
2 less solar than the US, and New York State, and yet
3 200,000 solar hot water systems, massive amounts of
4 solar electric systems, over a gigawatt a year. Not two
5 gigawatts by 2020, a gigawatt a year installed capacity.

6 We would urge you to learn from the hydro
7 example, capture the fuel, fixed price benefits, put in
8 an aggressive PV, 2000 megawatts by 2020, solar thermal,
9 2000 megawatts by 2015. Market, education,
10 transformation to have the public stand and embrace
11 these technologies, and put forth a very clear long term
12 goal of net zero.

13 Thank you.

14 MR. CONGDON: Our next speaker is Jeff Irish
15 from Hudson Valley Clean Energy, Inc.

16 MR. IRISH: Good afternoon. My name is Jeff
17 Irish. I'm the President and founder of Hudson Valley
18 Clean Energy. We are an engineering design and
19 installation firm for solar electric, solar hot water
20 and geothermal systems operating between New York City
21 and Albany.

22 I would like to congratulate you, Tom, and
23 the rest of the board, on your draft energy plan. I
24 think it's detailed, thoughtful and all encompassing.

1 Since I have only five minutes or less than
2 that left I'll get to the point. I think it is
3 deficient and light on its mention of potential for
4 solar PV. In particular, I think it's what I would call
5 static in its analysis. In particular, it's missing the
6 point that the costs of solar PV are declining rapidly
7 and will continue to decline rapidly.

8 Solar PV is, I would guess, is the only form
9 of energy which is coming down in cost and that will
10 continue to come down in cost very, very rapidly. I
11 would say it's analogous to what I saw as a young
12 engineer watching the personal computer industry emerge
13 and grow; watching the cost of memory chips and other
14 forms of semiconductors drop. It's similar to what we
15 saw in cell phones and their costs drop in performance
16 and see the same things.

17 So, I think that the plan should acknowledge
18 that. In particular, it should encourage an extremely
19 fast ramp up of design installation capability of solar
20 PV in the State of New York; otherwise, the state will
21 absolutely miss the boat.

22 Just to give you numbers, which I think I
23 could do as an insider to the industry. Last year,
24 2008, the unsubsidized cost of PV was about \$0.30 per

1 kilowatt hour over the 25 year warranty period of solar
2 modules. That's without any state or federal subsidy,
3 \$.30 a kilowatt hour. Today, that is around \$.20 to
4 \$.22 a kilowatt hour.

5 All industry forecasts, given the supply
6 demand of silicon solar modules, by 2011 will be down
7 into \$.15, \$.16 per kilowatt hour range. And there's
8 the new technologies that are coming on board -- thin
9 film, organic PV and other technologies -- which will
10 probably be commercializing. If you apply three or four
11 years out you are going to see costs come down to around
12 \$.10 or less per kilowatt hour.

13 We are also seeing that happen not only from
14 the cost of the modules themselves coming down, but
15 improvements in labor productivity and inverter
16 productivity and system design. So, there's multiple
17 forces that are driving down the cost of PV.

18 What that means is that I think that within
19 about three or four years, as soon as that, we will not
20 need state support for PV. I think the cost will be
21 down. I think the cost of alternative electricity will
22 be up high enough it will be close to a no brainer to
23 install PV on your home, on your business, whatever.

24 What we need in the State Energy Plan is

1 support for an aggressive ramp up in the capability of
2 the work force in the state to design and deploy this
3 technology. It is a home grown, local industry. It
4 cannot be outsourced with the installation of these
5 symptoms. We should support it here.

6 In particular, we have to fix net metering,
7 but I think we already know that because we've been
8 talking about that, but we have a thing coming up called
9 the RPS. I think it's an opportunity in the RPS to have
10 a dramatic shift from the main tier to the customer
11 sited tier in order to rapidly deploy as much need as
12 possible; create the demand for systems, which will
13 create demand for trained labor; and help us create the
14 work force so that three or four years out we don't need
15 a state subsidy or incentives. The industry will be
16 ready to deploy in huge volumes.

17 The nice goal that's being articulated by
18 many people is to have an installed base of
19 2000 megawatts by the year 2020. I think that's
20 absolutely doable. I think that should be articulated
21 in the energy plan as well.

22 So, my conclusions are to ramp faster. There
23 is an end game here. Many people in the state,
24 including commissioners of DPS and people from NYSERDA,

1 funding solar is not something that's going to have to
2 continue forever. I think we have got about three or
3 four years left that we need to do that and then we
4 won't need to do that anymore.

5 Since I don't think the buzzer's gone off, I
6 will follow up on the zero net energy building. Our
7 zero net energy building, which Ron Kamen mentioned, by
8 the way, costs less to produce and operate than a
9 conventional building. That's with today's technology.

10 What that means is if you put those extra
11 costs to make a building zero net energy into the
12 mortgage, the incremental mortgage payment is less than
13 what you pay for the energy in this place today.

14 Thank you.

15 MR. CONGDON: I had a brief follow up
16 question.

17 On the ramp up over the next three to four
18 years, if we are going to see a point in time within
19 four years when there won't be any state subsidy
20 required, you said for solar system installations, why
21 would the government subsidize that particular
22 technology now when there are other renewable
23 technologies that can be procured at much less cost?

24 And if the future is so bright for solar,

1 then wouldn't it make sense to wait until such time as
2 costs come down significantly to do that?

3 MR. IRISH: I think if you do that then three
4 or four years from now you will still have an infantile
5 industry in the state which is not ready to exploit the
6 cost position that the product is in.

7 I think what has happened in the last few
8 years is NYSERDA, with help from DPS and others, has
9 done a wonderful job starting to build an industry of
10 trained, professional designers and installers, that are
11 capable of doing safe high quality work.

12 And they started recently in the last couple
13 years to ration down incentives as the cost of PV has
14 come down. What I am asking is for that to continue,
15 but with a heavier funding level over the next three or
16 four years, so that instead of having 130 eligible PV
17 installers, as we have right now, we can have 2000 in
18 three or four years.

19 That needs to be in place. And those jobs
20 and those skilled people need to be in place so that
21 they can rapidly design and install this technology
22 three or four years out. Otherwise, we will be
23 struggling to do that while the technology is already
24 there. It takes time to create a trained labor force.

1 MR. CONGDON: Thank you.

2 Our next speaker is Patrick Moore,
3 Greenspirit.

4 MR. MOORE: Good afternoon. Thanks for the
5 opportunity to present to you. My name is Dr. Patrick
6 Moore. I began my career as co-founder and 15 year
7 leader of Greenpeace back in the '70s and '80s. I have
8 nearly 40 years of experience in the international
9 environmental field and dedicated my entire career to
10 the environment and sustainability.

11 Additionally, in this context, I serve as an
12 advisor to New York Affordable Reliable Electricity
13 Alliance, NY AREA for short, working with business,
14 labor, environmental communities and citizens of New
15 York State to develop an energy strategy for New York.

16 And I have reviewed the Governor's proposed
17 plan. I have to say that we agree with virtually all of
18 it. It's very well organized. It's been a long time
19 since there was anything approaching a plan for energy
20 for New York State. And so it's good to see that this
21 has been addressed so thoroughly.

22 In particular, the green jobs creation,
23 energy conservation and efficiency, and renewable
24 energy, such as biomass, solar thermal, and, from my

1 point of view in particular, geothermal heat pumps,
2 which are the heart of efforts to make buildings
3 renewable and to remove fossil fuels from the need and
4 the infrastructure. It's the key technology, along with
5 solar hot water.

6 This will definitely reap benefits for New
7 York's natural environment down the road. One exception
8 that we are concerned about in this proposal, of course,
9 is the statement in the plan that the plan wishes to see
10 the Indian Point nuclear reactor shut down. In other
11 words, its license not to be renewed.

12 My support for Indian Point is based on an
13 extensive knowledge of science and the environment.
14 And, along with a lot of other environmentalists, many
15 years ago I also was opposed to nuclear power. I think
16 we got caught up in the anti-nuclear movement concern
17 for nuclear war. We were told during the Cold War we
18 were all going to be fried.

19 We concluded, incorrectly, that everything
20 nuclear was evil. There are, in fact, beneficial uses
21 of nuclear technology, one of which is nuclear medicine.
22 The other of which is nuclear energy. There is no
23 doubt, for example, that between the two of them,
24 hydroelectric and nuclear, produce over half of New

1 York's electricity without fossil fuel.

2 This is why New York is the third lowest CO2
3 per capita emitter in the country is because of the
4 benefits of nuclear and hydro. Nuclear itself produces
5 over half of the clean energy in the state at the
6 present time. At a national level, nuclear energy
7 produces 75 percent of the clean energy in the United
8 States. So, already, nuclear energy is playing the
9 largest role in reducing what would otherwise be a need
10 for base load fossil fuel electricity, coal or gas, of
11 any technology that exists to date.

12 In particular, the Indian Point reactors
13 produce over 90 percent of the clean energy in downstate
14 New York. Shutting down Indian Point would basically
15 rip the heart out of clean energy where most of the
16 people in this state live and breathe the air. And for
17 why? We don't really understand.

18 We do see, though, there are five objectives
19 to the Governor's plan. To maintain reliability.
20 Shutting down Indian Point would go against that.

21 Reduce greenhouse gas emissions. By the
22 report's own admission shutting down Indian Point would
23 increase greenhouse gas emissions with at least
24 700 megawatts of new gas.

1 Stabilize energy cost. By its own admission,
2 the plan says it would increase costs of electricity to
3 shut down Indian Point.

4 Reduce public health and environmental risks.
5 Shutting down Indian Point means dirtier air, increasing
6 risk to public health.

7 And improving energy independence. It's hard
8 for me to see how shutting down a domestic, 2000
9 megawatt clean base load power source would do anything
10 but reduce energy independence.

11 Part of the success of the Regional
12 Greenhouse Gas Initiative, from New York's point of
13 view, is the Indian Point and other nuclear plants and
14 the hydro plants in this state. It's possible for New
15 York to work successfully in this plan as a result.
16 Shutting down Indian Point jeopardizes the ability of
17 New York State -- would jeopardize the ability of New
18 York State to comply with this.

19 The reasons given -- to conclude -- the
20 reasons given in the report for favoring shutting down
21 Indian Point are safety and environment. On the safety
22 front, you probably know that the Nuclear Regulatory
23 Commission has already passed Indian Point on a safety
24 perspective. In other words, Indian Point nuclear

1 reactor is safe compared to the 103 nuclear reactors in
2 the United States, and there is absolutely no reason
3 stated by the NRC to consider Indian Point as a safety
4 problem.

5 On the environmental front, the only thing
6 mentioned in the draft energy plan is the impact on the
7 Hudson River. Everyone who works in energy knows that
8 thermal plants, such as nuclear, coal and gas plants,
9 that discharge slightly warmer water back into the
10 receiving body, that this enhances aquatic life in the
11 area of the discharge.

12 Everyone knows that. Fishermen know it.
13 Biologists know it. Nuclear plant operators know it.
14 There is no evidence of damage being caused to fish
15 stocks. As a matter of fact, since the Indian Point
16 reactor was constructed, the health of the Hudson River
17 has done nothing but improve the health of its aquatic
18 life.

19 And even Riverkeeper and Bobby Kennedy, Jr.
20 himself have stated that publicly, that the Hudson River
21 is the best fished river north of the equator on the
22 East Coast in terms of the stocks of fish that are in it
23 to date, because it has been rehabilitated from when the
24 chemicals were being dumped in it during the '60s and

1 '70s when we weren't looking after that.

2 The environmental movement can take credit
3 for having cleaned up the Hudson River, but it's
4 certainly not Indian Point that is causing any damage to
5 fish stocks there, which are generally very healthy.

6 Just in terms of the safety of nuclear energy
7 for people, the Columbia University study published in
8 2004 of 53,000 nuclear plant workers at 16 different
9 sites in the United States showed that they live longer,
10 have lower rates of cancer and less disease than their
11 counterparts in the general population.

12 In other words, it is safer to work inside a
13 nuclear plant every day than it is to be a member of the
14 general public. Seems to me that that puts to rest much
15 of the concern about safety of nuclear power in the
16 United States. In fact, it is one of the safest
17 industries in the US and the world today.

18 So, in conclusion, I recognize the work of
19 the panel, the planning board, the Governor, in
20 producing an excellent piece of work which will help
21 guide the future of energy development in New York
22 State, but with that one exception: Shutting down over
23 90 percent of the clean energy in downstate New York,
24 where most of the people live and breathe the air every

1 day, doesn't make any sense to us at all.

2 Thank you very much.

3 MR. CONGDON: Thank you.

4 Our next speaker is Al Samuels from Rockland
5 Business Association.

6 MR. SAMUELS: Good evening. My name is Al
7 Samuels, I'm President and CEO of the Rockland Business
8 Association. We are an organization of 1,069 businesses
9 in Rockland, Westchester and Orange Counties. I thank
10 you for the opportunity to come here tonight, especially
11 before an old friend. Just so you folks know, Tom and I
12 wrote legislation a long time ago.

13 The issues of energy and environment are very
14 important issues for us here in Rockland. We have
15 embraced a forward looking agenda that supports
16 sustainability at every level. Our Green Council helps
17 REA members realize the bottom line benefits of going
18 green and empowers members to find a sustainable
19 solution that is best suited for their business.

20 We host an annual green seminar devoted to
21 furthering the development of the new generation of
22 green collar jobs.

23 In reviewing the plan that you put forth in
24 August, there are a number of points on which we

1 absolutely agree. First and foremost, we are so
2 gratified to see that the proposal includes new support
3 for a new power plant siting law modeled on the expired
4 Article X. Enactment of such a proposal would help
5 expedite new generating facility and construction
6 throughout the state, and would be particularly helpful
7 in North Rockland, where I reside. Not only that we
8 lost Lovett facility, but we never realized the
9 construction of Bowline 3.

10 Secondly, the decision to tap the vast
11 resources of the Marcellus shale will not only
12 facilitate new economic activity, but also result in the
13 development of new base load energy produced in New York
14 for New Yorkers. More supply will bring about lower
15 energy costs for consumers, while moving our state
16 further towards energy independence.

17 There are a number of other points on which
18 we also agree with. These include: Utilizing right of
19 way for new transmission; developing a new Smart Grid;
20 supporting new renewable energy; R&D; encouraging
21 greater energy efficiency and conservation.

22 These will result in a more reliable and
23 stable energy supply, will create new jobs and will
24 facilitate new investment throughout the state.

1 There are, however, a number of areas of
2 concern. For the members of the Rockland Business
3 Association, they have made it clear that the issue of
4 utility costs remains one of the most important issues
5 in growing their business and keeping their business in
6 New York. It's a pressing issue for the business
7 community.

8 We are a border county with New Jersey. We
9 have a unique perspective on the need to embrace the
10 business friendly environment. Just yesterday we had
11 the privilege of meeting with Dennis Mullen, the new
12 Chairman of Empire State Development, and we made the
13 point that we must have retention initiatives and
14 incentives to match the attraction initiatives and
15 incentives of states like New Jersey. Lower energy
16 costs will fulfill that, as well as being an attraction
17 incentive.

18 That's why we believe that the final plan
19 must provide a mechanism to lower utility costs. Energy
20 efficiency and conservation alone we fear will not do
21 this. It will help. Over a period of time we will gain
22 more and more appreciation as a people for conservation
23 but, unfortunately, it's not going to deliver to us in
24 the immediate near future the savings that we need.

1 We believe property tax reform, elimination
2 of the gross receipts tax, reduction of utility fees are
3 also needed, and we do implore you to make these part of
4 your final plan.

5 Secondly, the August plan places the need for
6 more reliable base load power secondary to the need for
7 greater energy efficiency. As I have just indicated, we
8 think that needs to be reversed.

9 The Independent System Operator forecast that
10 energy demand will rise for New York even with
11 conservation and efficiencies factored in, and
12 renewables, simply cannot make up for the loss of base
13 load power. We ask that you reevaluate this focus in
14 the composition of your final plan.

15 Thirdly, there is the issue of Indian Point.
16 Your plan calls for the plant's closure and we do
17 strongly disagree. From the business standpoint,
18 shutting down Indian Point's 2000 megawatts of safe,
19 clean power would have a serious impact on our entire
20 regional economy.

21 Our colleagues at the Business Council of
22 Westchester did a study not too long ago and found it
23 would impact more than 10,000 jobs. It would foster a
24 negative economic impact on the neighborhood of \$1

1 billion.

2 Indian Point is even more than an economic
3 engine. More than half of our state's electricity is
4 produced from virtually emissions free resources, such
5 as Indian Point. It's a key reason why New Yorkers
6 achieved the distinction of holding the third lowest per
7 capita carbon emissions rate in the nation, and why our
8 state is able to lead the way in capping greenhouse gas
9 emission through the regional greenhouse gas initiative.

10 It would take a minimum of four fossil fuel
11 burning facilities to make up for Indian Point's base
12 load power. Frankly, we can't see how Indian Point
13 would be favorable to four fossil fuel burning plants.
14 We just don't think that's the right way to go for the
15 environment.

16 The plan also cites safety concerns regarding
17 Indian Point. As a North Rockland resident, I live in
18 Garnerville, I live within the ten mile radius of Indian
19 Point. And it is reassuring to us that the federal
20 government continues to keep safety concerns paramount
21 in their decision making process, and that the NRC's
22 independent assessment stated that Indian Point can
23 safely operate for another 20 years. I think that that
24 actually rebuts the case against the facility which is

1 made in the proposed state energy plan.

2 In closing, I would like to offer some
3 praise: To the Governor, to an old friend Tom Congdon,
4 to the rest of the members of the Energy Planning Board.
5 You have performed a valuable service and you kept an
6 open line to the public. We do appreciate it. You have
7 acted in a transparent and dignified manner. And for
8 that, the members of the Rockland Business Association
9 thank you.

10 MR. CONGDON: Thank you very much.

11 Our next speaker is Robert Freeston, New York
12 Solar Energy Society.

13 I would like to remind our speakers that the
14 beeping sound you hear behind you means that your five
15 minutes is up, and when you hear that beep if you could
16 please wrap up your comments so that we can make sure
17 everyone gets a chance to deliver their statement.
18 Thank you.

19 MR. FREESTON: Thank you. I left a piece for
20 the members of the group. It was developed for Congress
21 but a great deal of it is relevant.

22 First, I would like to agree with Jeff
23 English who spoke before about adding the energy profile
24 to the mortgage system. I'm with New York Solar Energy

1 Society. We're a state chapter of the American Solar
2 Energy Society. It's 55 years old and many of its
3 members were pioneers in solar.

4 So, first, we support the Vote Solar plan for
5 2000 megawatts of PV by 2020. Needs about \$.82 per
6 month support per residential electrical customer. With
7 the legislature's long delay in passing commercial net
8 metering, we have fallen out of the top five in
9 installations and out of the top ten per capita.

10 We recommend the feed in tariff, unlike 21
11 European countries, high at first, step down over time
12 to zero.

13 Specifically from the plan, the efficiency
14 section, page five, achievable by 2015, end use space
15 heating projected reductions of one percent residential,
16 one percent commercial, zero industrial. Water heating,
17 one percent commercial, zero industrial. Outdoor
18 lighting, one percent residential, one percent
19 commercial, zero industrial.

20 We think we can push way beyond these
21 percents. Retrofits with geothermal and now residential
22 and commercial air source heat pumps have had big
23 impacts. Europe has commercial equipment far beyond
24 what is available in the United States.

1 GE is just now opening a factory to produce
2 heat pump derived hot water from ambient air. LEDs are
3 applicable with all lighting situations with 80 to
4 90 percent reduction in power.

5 Under natural gas, "Few new or innovative
6 uses for natural gas and few envision." This is
7 contradicted elsewhere in the plan, and rightfully so.

8 Gas based cogeneration has huge potential via
9 conventional efforts, microturbines and fuel cells.
10 Efficiency is doubled. We think market speculation has
11 to be addressed by government.

12 Back to efficiency. New initiatives to
13 overcome financial barriers. First, the power purchase
14 agreement model is becoming much more common. Up front
15 financing is contracted as payback over time from power
16 production.

17 Second, Babylon, Long Island has a model tax
18 base operation. Municipality issues bonds for
19 efficiency improvements, residences are upgraded and the
20 bonds are paid via tax attachment to the building. The
21 homeowner is cash positive via energy savings.

22 We would like to see a requirement for energy
23 audit on sale of a building. This is a time to upgrade.
24 This is already done in Britain.

1 Under renewables. Geothermal and Act Depth in
2 Western New York, more than a hundred degrees Fahrenheit
3 source of heating and commercial process heat, not
4 electricity.

5 We urge you to look at the purecycle
6 equipment of United Technologies that use a closed cycle
7 steam system to create power in this temperature range.
8 This is a commercial equipment used in the western
9 United States.

10 We would like power company incentives to
11 retrofit ground source heat pumps to buildings with
12 existing central air conditioning. This would reduce
13 summer loads by 40 percent while increasing winter loads
14 to the advantage of the power companies.

15 We urge you to require that sub megawatt
16 hydro be allowed on the grid. It cannot be excluded.
17 Perhaps the limit could be 100 kw. We note the addition
18 of utility scale solar thermal by FPL in Florida as a
19 supplement to existing generation station. It's much
20 less efficient than in the desert but also much less
21 expensive because the existing infrastructure is in
22 place. We support the use of fly wheel storage and
23 regulation as proposed for Stephentown.

24 Overall, the plan is very comprehensive and

1 diverse. We feel solar needs more emphasis as it
2 approaches peak grid parity.

3 Thank you.

4 MR. CONGDON: Thank you very much.

5 Our next speaker is Joe Karas from Empire
6 State Regional Council of Carpenters.

7 MR. KARAS: Good evening. My name is Joseph
8 Karas and I am a council representative for local 11 of
9 the Empire State Region Council of Carpenters. I want
10 to thank you for the opportunity to share our views on
11 the Governor's proposed energy plan.

12 The proposal as written undoubtedly offers
13 progress towards our shared goals of energy efficiency
14 and energy conservation. In fact, the draft report
15 specifically lists these two goals as principal focus of
16 the plan. There are clearly progressive goals,
17 certainly befitting the community we now stand in today.

18 Additionally, there are a number of
19 additional proposals contained in the proposal plan that
20 offer us hope. Support for a new modernized grid is
21 long overdue. Further investment in alternative energy
22 research and development, particularly towards storage,
23 holds great promise for the state's economy.

24 Additionally, I applaud your clear,

1 unequivocal support for a new power plant siting law.
2 We need new power and we must fortify our existing base
3 load supply. This new law should be given priority
4 status during the next legislative session.

5 I would also like to point out where we
6 differ. The Empire State Regional Council of Carpenters
7 and its members support the continued operation of
8 Indian Point. This has been publicly stated in the past
9 and I'm here to reaffirm our support presently.

10 The facility produces 2000 megawatts of
11 affordable, reliable base load power and is directly
12 responsible for millions of dollars in direct economic
13 impact for our region. It's also responsible for
14 hundreds of well paying union jobs, which is a matter that
15 is close to my heart.

16 From an environment standpoint, Indian Point
17 produces its electricity in an emission free manner.
18 This is good for our air and our water and lowers our
19 rates of child asthma and other ailments that impact our
20 communities.

21 But from a personal standpoint, I ask you to
22 consider the fact that I live in Buchanan, home to
23 Indian Point, and have seen the progress made on the
24 Hudson River, a fact that I take great pride in. I've

1 been a resident for 18 years in Buchanan.

2 I see the fishermen along the shores. I am a
3 fisherman. I see them in Rockland, Westchester and in
4 the Buchanan area, northwest in Peekskill and southwest
5 in Croton. I see the children playing in the parks
6 along the river. I see the boaters enjoying their time
7 sailing and cruising along the river, and the
8 fisherman's catch.

9 If there were any true environmental concerns
10 about Indian Point, my hometown of Buchanan would be
11 feeling the effects presently. What I described to you
12 would not be the case. Take the word of someone who
13 actually lives there: Indian Point is safe and has been
14 a good neighbor.

15 I ask that the final energy plan support the
16 continued operations of Indian Point. Thank you very
17 much.

18 MR. CONGDON: Thank you for your statement.

19 Our next speaker is Eric Spomer from Catalyst
20 Renewables.

21 MR. SPOMER: Thank you for this opportunity.
22 I'm Eric Spomer, President of Catalyst Renewables. We
23 develop and operate geothermal power projects in
24 California, and biomass facilities in New York.

1 The draft plan is thorough and thoughtful,
2 but we ask that footnote 55 of the draft energy plan be
3 deleted. The footnote states there are environmental
4 impacts and health risks associated with the combustion
5 of biomass and biofuels that are the subject of current
6 and ongoing investigation.

7 This footnote, as public policy, is
8 unacceptable to our industry, as it is not factual and
9 in its tone implies negative environmental and health
10 effects. In fact, the opposite is true.

11 Facts supported by hard data from reliable
12 sources show the following: First, biomass is the only
13 energy resource that can actually reduce greenhouse
14 gases. Second, ground level health effects from
15 deficient biomass to energy projects are negligible.
16 And third, sustainable biomass fuel harvesting practices
17 significantly improve forest health and ecosystems.

18 Myth one, biomass to energy is no better than
19 fossil fuels as far as greenhouse gases are concerned.
20 This is patently false. While some greenhouse gases are
21 emitted from the stack during biomass combustion, it is
22 far better to efficiently combust waste from forest
23 products, activities and other sources for energy
24 production than to allow the material to decompose.

1 Rotting wood will emit approximately 50 percent methane
2 and 50 percent CO₂, with methane being 20 times as
3 damaging as a greenhouse gas than CO₂.

4 According to numerous studies, which I will
5 provide to you, biomass power generation reduces CO₂
6 equivalent greenhouse gases by as much as 50 percent.

7 Myth two, and quoting the footnote, there are
8 health risks associated with the combustion of biomass.
9 This is common argument, not based on current science
10 and data. Biomass has effectively no SOX or mercury
11 emissions, which are common with coal and oil
12 generation.

13 Biomass combustion does emit some particulate
14 in NOX, but as a result of significant investment in
15 design improvements by companies like Catalyst, new
16 state of the art facilities like our Onondaga project in
17 Solvay, are incredibly efficient.

18 To put this in perspective: A single
19 fireplace has 25 times the ground level impact from
20 emissions as the Onondaga facility. That means that for
21 the same health impact as your fireplace we can operate
22 25 Onondagas, providing enough energy to power and heat
23 over 700,000 homes.

24 A single certified home pellet stove has

1 three and a half times the ground level impact of
2 Onondaga. Clearly, an Onondaga type biomass plant is a
3 much more efficient way to provide heating than burning
4 your own.

5 Further, Onondaga will emit less than half
6 the particulate of NOX than the combined cycle natural
7 gas plant it is replacing. And on a BTU basis, has
8 approximately the same emissions as the most efficient
9 combined cycle gas plants.

10 Myth three, biomass harvesting has negative
11 impacts on forest health and ecosystems. I will provide
12 you with the Sierra Club's biomass guidance, which
13 effectively states that the biomass waste must be
14 gathered or harvested in a sustainable manner to avoid
15 negative impact on forest health. Further, they are
16 concerned that a biomass plant might resort to
17 unsustainable methods if fuel is in short supply.

18 We agree completely. Catalyst formed
19 TreeSource Solutions to provide biomass fuel aggregation
20 services to users in New York for this very reason. The
21 New York RPS requires strict compliance with standards
22 based partially on Catalyst's practices at Lyonsdale.

23 Further, we have commenced a dedicated fuel
24 plantation program in conjunction with SUNY College of

1 Forestry to ensure adequate supply.

2 The Sierra Club also provides guidelines
3 regarding fuel farming. TreeSource's fuel plantations
4 meet all of the Sierra Club's concerns.

5 And finally, regarding our effect on
6 ecosystems, I would simply refer you to the Audubon
7 Society's Wildlife and Forestry in New York's Northern
8 Hardwoods study which describes the benefits of
9 sustainable forest management.

10 In closing, energy efficiency and
11 conservation are clearly the most effective ways to
12 reduce environmental effect of power generation.
13 However, we cannot eliminate generation completely.
14 There is a limit to how much wind the electric grid can
15 handle.

16 State of the art utility scale solar in
17 Arizona currently may work at \$.12 a kilowatt hour, but
18 in New York that same technology would require about
19 twice that and would provide very little generation
20 during New York's winter peak.

21 Barring the construction of a lot more
22 nuclear capacity, combustion will continue to provide a
23 meaningful portion of New York's energy needs.

24 Biomass is superior to any generating fuel as

1 far as greenhouse gasses are concerned. Biomass is
2 comparable to natural gas for ground level health
3 impacts. Sustainable biomass harvesting improves forest
4 health and ecosystems. And biomass has by far the
5 largest economic impact of any fuel source, with good
6 paying jobs and every fuel dollar being spent locally.

7 I urge you to consider the facts and delete
8 footnote 55 of the energy plan and recognize the value
9 of New York's abundant biomass resource.

10 MR. CONGDON: Thank you very much.

11 Our next speaker is Fred Zakman from
12 SunEdison and the Solar Alliance.

13 MR. ZAKMAN: Good evening, Tom and the other
14 members of the State Energy Planning Board. Appreciate
15 your willingness to listen to my comments tonight.

16 As indicated, I am the Director of Regulatory
17 Affairs with SunEdison. We're the nation's largest
18 solar energy services provider. I'm also here
19 commenting tonight on behalf of the Solar Alliance, with
20 30 of the nation's largest manufacturers, developers and
21 financiers of solar and PV equipment.

22 Having done state energy planning myself in a
23 former life, I really appreciate the analytic rigor, the
24 balancing, the difficult balancing of interests, and

1 your receptivity to public input that has gone into this
2 process. Particularly noted the recognition of the
3 significant benefit streams afforded by renewable energy
4 development and solar PV in particular.

5 The ability to create high paying, high
6 quality jobs that can't be outsourced; solar PV's
7 contribution to reliability and energy security, and
8 perhaps most importantly, the ability of renewables of
9 solar PV to make the significant down payment we need to
10 help stabilize the climate for future generations.

11 I think where I would like to spend the bulk
12 of my comments is: In spite of the recognition of the
13 benefits of renewables and solar PV in particular, I
14 think what the current version of the plan lacks is the
15 ability to translate that potential, to realize that
16 potential into actual benefits.

17 And where I think the plan falls short is it
18 really lacks a bold, coherent, comprehensive, specific
19 strategy for solar PV. Kerry Holland, the President of
20 the Solar Alliance, testified in Albany. She outlined a
21 six point platform to create a world class solar PV
22 marketplace in New York. I don't want to reiterate
23 that. I just want to high light a couple key points in
24 that platform.

1 First off, as has been mentioned previously,
2 what the State Energy Plan needs is to create a long
3 term vision for the solar marketplace in New York. Set
4 long term goals. We support, consistent with our
5 speakers, a 2000 megawatt by 2020 target. Really what
6 the State Energy Plan is all about is setting a vision
7 and putting in place policies and programs to get there.
8 And unfortunately, all the plan does at this point is
9 reiterate the renewable energy task force goal of 100
10 megawatts by 2011.

11 First of all, we need to lock that goal in.
12 The renewable energy task force report came out in April
13 of 2007. The Public Service Commission is still
14 considering whether to ratify that goal and to commit
15 the resources toward the realization of targets.

16 So, that's a necessary but insufficient step.
17 We really need to go beyond 2011. For companies like
18 mine that are looking where to invest resources, where
19 to hire people, invest in modules, and deploy capital,
20 we need some long term visibility. We need to know
21 where the market is going to be not next year but five
22 years, ten years out. Unfortunately, in New York, we
23 just don't have that predictability or visibility.

24 Secondly, as had been mentioned by prior

1 speakers, it's important for the state to commit the
2 resources towards realization of those targets to set a
3 stable, significant and sustained incentive program.

4 Unfortunately, New York's PV program has
5 been prone to fits and starts. Funding is allocated for
6 periods of a year that meets pent up consumer demand,
7 and then uncertainty about where the marketplace is
8 going from that point forward.

9 So, the better functioning programs create a
10 long term incentive stream for a period of a decade or
11 more. Those incentives can come down, but the goal
12 again is market transformation. Want to achieve grid
13 parity, accelerate grid parity, reach the point where
14 solar PV is cost competitive with conventional
15 resources. And right now, solar PV is slightly more
16 expensive, so it's really the role of incentives to
17 accelerate that drive to grid parity.

18 Lastly, there is a need for a greater
19 diversity in the program. Current incentive program is
20 capped at 80 kilowatts. Effectively that means support
21 for a handful of residential and small commercial
22 projects around the state. Where you really drive scale
23 and meet significant targets is where you provide
24 incentives for systems up to the net metering target of

1 two megawatts.

2 Again, appreciate the opportunity.

3 MR. CONGDON: Thank you.

4 Just for the record, the 100 megawatt target
5 recommended by the renewable energy task force by 2011
6 may be achieved through a number of different vehicles,
7 not just the customer sited tier under the RPS, but also
8 under the Power Authority long term contracts.

9 To date, there is one RFP out from the Long
10 Island Power Authority for 50 megawatts and there's
11 another one in the works for New York Power Authority
12 for 100 megawatts. So, between those two RFPs, we are
13 hopeful that we will exceed the 2011 target that is
14 outlined in the renewable energy task force report, and
15 multiple by more than ten times the current installed
16 capacity in the State of New York for solar systems.

17 To the earlier point, kind of ramping up in
18 the short term as we hope to achieve grid parity.
19 Anyway, I just wanted to remind the speakers that those
20 efforts are underway as well, as well as the renewable
21 portfolio standard ongoing with the PSC.

22 Our next speaker is Gabrielle Vincalette from
23 the New England Task Force. Perhaps I mispronounced the
24 name. Go on to the next speaker. Joseph Pollock from

1 Entergy.

2 MR. POLLOCK: Good evening. My name is Joe
3 Pollock, Site Vice President for Entergy Nuclear's
4 Indian Point Energy Center, which includes operating
5 units 2 and 3.

6 First let me thank the committee for the
7 opportunity to speak today and commend the Governor for
8 reviving the state energy planning process. All prior
9 State Energy Plans have recognized the importance of
10 Indian Point. Today I would like to present to you the
11 facts that warrant continuing policy embraced by the
12 previous energy plans that acknowledge Indian Point as a
13 critical resource.

14 Indian Point's 2 million kilowatts of clean
15 power plays a critical role in meeting the regional
16 greenhouse gas initiatives, known as RGGI. New York
17 cannot meet RGGI without Indian Point.

18 Rather than single out Indian Point as a
19 problem, the plan should embrace it as a solution for
20 New York's energy needs and vehicle for realizing its
21 environmental goals.

22 When concerns were raised about safety and
23 security at Indian Point, Entergy listened and did
24 something about it; and where concerns persisted,

1 Entergy brought in independent security and safety
2 experts. And of course, the NRC is always reviewing
3 safety at Indian Point.

4 Others also have conducted independent
5 reviews focusing on Indian Point's role in providing
6 electricity in New York. Let me cite the conclusions
7 drawn by the experts who spend thousands of hours
8 performing those independent assessments.

9 Closing Indian Point would result in the loss
10 of thousands of high paying jobs and the loss of a
11 billion dollars of direct economic impact. Closing
12 Indian Point would immediately increase air pollutants
13 and greenhouse gas emissions.

14 It is disappointing that the plan would
15 ignore these facts and cite only the claims for opposing
16 Indian Point; claims that pale in comparison to the
17 large body of independently verified and corroborated
18 evidence that supports Indian Point's continued
19 operation.

20 For example, The National Academy of
21 Sciences, with the support of Congressional funding,
22 concluded that while replacing the plants was
23 technically feasible, it would result in decreased
24 electricity reliability, increased air pollution, and

1 significantly higher power costs for New Yorkers.

2 The New York Independent System Operator has
3 consistently stated that the stability of the grid would
4 be threatened if Indian Point was closed. In its most
5 recent report, it stated, "Retirement of just one of the
6 two Indian Point nuclear units would cause an immediate
7 violation of reliability standards".

8 In addition to NYISO, a multitude of other
9 independent energy experts and organizations have come
10 to the same conclusion: As a practical matter, you
11 can't shut down Indian Point.

12 Entergy owns and operates 11 nuclear power
13 plants, several right here in New York. These plants
14 provide a base upon which many of the alternative energy
15 sources, such as solar and wind power, can be built.

16 Since purchasing the plants, Entergy has
17 invested hundreds of millions of dollars in
18 improvements. As a result, we have significantly raised
19 both the safety and the operating performance of these
20 plants. Today, Entergy's plants consistently get NRC's
21 top safety rating.

22 Entergy has also raised the reliability of
23 these plants to over 97 percent from a previous historic
24 average in the 60 percent range. After 9/11, when

1 security at Indian Point was questioned, New York State
2 Office of Public Security Director James Kallstrom lead
3 a team of experts and conducted a far-reaching security
4 assessment, working closely with the FBI. Kallstrom
5 said, "Security at the plant is robust."

6 US Office of Homeland Security, NRC and
7 others, have all conducted assessments and found Indian
8 Point to be well protected and secure. Independent
9 experts have also reviewed our emergency plans and noted
10 they are among the best in the country.

11 In the comprehensive independent safety
12 evaluation done in 2008, 12 panelists spent thousands of
13 hours analyzing every aspect of plant operations. These
14 highly respected individuals, from both the private and
15 public sectors, have expertise in nuclear safety,
16 engineering, operations, security and emergency
17 planning.

18 Their findings were published in a report
19 with the following conclusions: Indian Point meets the
20 US Nuclear Industry's highest standards; operations are
21 conducted competently and professionally; and Indian
22 Point is safe.

23 I personally recommend to the panel that they
24 review the report, especially the appendix, which

1 addresses in detail all the public concerns raised in
2 the last five years.

3 In closing, I ask that you remove the
4 language that suggests the state would be better without
5 Indian Point. There are many independent experts who
6 have spent thousands of hours reviewing safety and
7 security at Indian Point and the critical role the
8 plants play in providing clean and reliable energy.

9 I have provided copies of the report for your
10 review. I ask that you review these reports with the
11 same diligence as the professionals who dedicated
12 themselves to getting to the truth about Indian Point.

13 I urge you to support the continued
14 operations of all nuclear plants in our great state of
15 New York. Thank you.

16 MR. CONGDON: Thank you very much.

17 Our next speaker is Kevin Sheen from
18 EverPower Wind Holdings.

19 MR. SHEEN: Thank you. My name is Kevin
20 Sheen. I am Senior Director of Development. We are a
21 wind power development company headquartered in New York
22 City, with offices in Portland, Oregon and Pittsburgh,
23 PA. I appreciate the opportunity to comment on the
24 State Energy Plan draft document.

1 We currently have four projects under
2 development in New York, including a 65 megawatt powered
3 wind project. We received a conditional use permit to
4 begin construction -- we had hoped to begin construction
5 in 2010.

6 We applaud the Governor for his commitment to
7 clean energy to combat climate change, as evidenced by
8 his support in various executive orders. We appreciate
9 the work that the board has put into this draft State
10 Energy Plan. And I would like to make a few brief
11 comments that focus on renewable energy, and many of
12 them will echo the comments that were made previously by
13 the Alliance of Clean Energy New York, of which we are a
14 member.

15 In the topic of renewable energy, we feel New
16 York needs to continue its commitment to renewable
17 energy and rededicate itself to maintaining the product
18 investment that had made New York a leader in attracting
19 renewable energy investment and contributes to energy
20 security and supports economic development in state.

21 New York needs to continue to encourage
22 renewable energy in many ways. Here are a few points
23 that New York should consider. Continued funding for
24 the RPS program and encourage agency permitting

1 coordination. Progress in meeting New York's clean
2 energy goals has stalled, primarily because of a lack of
3 funding for the RPS and ever changing permitting
4 requirements at a state and local level.

5 The inconsistent nature of the RPS funding
6 has caused a boom and bust cycle that is very difficult
7 for developers like mine to plan for. New York needs to
8 show that its commitment to the RPS program will be
9 matched by sufficient funds to meet goals. Agency
10 coordination will also help for the support for permits
11 necessary for project development.

12 The marketplace needs a clear signal that New
13 York remains committed to supporting the RPS goals. As
14 one of the gentleman who spoke earlier, it's difficult
15 to plan a large capital investment or deploy resources
16 on six months' notice or a year's notice. When looking
17 to deploy resources, we look a bit longer term than
18 that.

19 New York should explore shifting the RPS
20 procurement responsibility to load serving entities.
21 PSC should look at shifting the central procurement
22 model to the RPS, the one where purchasing
23 responsibility is placed on the load serving entities,
24 as in the case of most other states.

1 This could alleviate the problem of
2 insufficient funding and delays in procurement; also,
3 open up the market to new investors and enhanced market
4 liquidity.

5 Establishment of a renewable energy tracking
6 system should be also endorsed, has remained stalled in
7 the PSC. It should accompany this. But mostly opening
8 up a market based system really could enhance the
9 private investment.

10 We also believe transmission and siting are
11 two main issues and two problems in the challenges for
12 private investors. New York should encourage investment
13 in transmission infrastructure to ensure the use of
14 clean energy resources. The plan should support
15 increased investment in transmission, supporting full
16 development of the state's domestic renewable
17 infrastructure with cost share among beneficiaries and
18 utility investment recoverable through rate base.

19 Transmission upgrades should include both
20 high voltage lines for generation in wholesale market
21 and distribution upgrades to accommodate distributed
22 on-site generation.

23 We should also advocate for the creation of a
24 one stop shop for streamline permitting for new

1 generation. The draft plan calls for a reinstatement of
2 a siting board, but really provides no plan for
3 implementation. The agencies that have a role in the
4 previous siting board should discuss how to coordinate
5 their permitting goals in a timely manner which could
6 spur on increased development.

7 Finally, I would add some comments. As a New
8 York City based company, EverPower is poised to make a
9 significant increased investment in clean energy in New
10 York. However, states like Pennsylvania, Michigan and
11 Ohio are making it easier to invest and build renewable
12 energy projects in their state.

13 In this climate, EverPower has no choice but
14 to look elsewhere to put their significant investment
15 dollars. New York can contribute to attract project
16 investment, but only if it's able to remove the boom and
17 bust cycles that plague the REC program at this point.

18 I will leave you with a small anecdote.
19 Recently one of the largest wind power developers in the
20 nation, a developer very active in New York, put on hold
21 a plan to build 100 megawatt project for the state
22 because of the words of the Town Supervisor. "I think
23 they are finding out that doing business in New York
24 State is the closest thing to hell outside of doing

1 business in California."

2 This company, like EverPower, is shifting
3 significant resources to Ohio and other neighboring
4 states, where the climate is much more favorable to wind
5 power and other renewables.

6 I urge you to continue to foster renewable
7 energy as a critical part of the state's energy plan and
8 get rid of the boom and bust cycle nature of the RPS.

9 Thank you.

10 MR. CONGDON: Thank you. Appreciate your
11 statement.

12 The next speaker is Jay Kooper from Hess
13 Corporation, also representing the Retail Energy Supply
14 System.

15 MR. KOOPER: Good afternoon. My name is Jay
16 Kooper, I'm Director of Regulatory Affairs for the Hess
17 Corporation, competitive retail electric and gas
18 marketer in New York State; and the President of the
19 Retail Energy Supply Association, a trade association of
20 12 member companies, many of them Fortune 500 affiliated
21 companies who are also ESCOs in the State of New York.

22 RESA commends the State Energy Planning Board
23 for recognizing the role that the New York State energy
24 markets have played in the tremendous gains in power

1 plant efficiency, the support for renewable power, the
2 stimulus for investment in electricity and natural gas
3 infrastructure in constrained areas, and the incentive
4 created for demand-side products and services.

5 The draft State Energy Plan clearly assumes
6 that the markets in clean energy technologies that the
7 State would like to encourage are best done with the
8 competitive markets design as a basis.

9 RESA companies see the impact of markets and
10 new products and services that they are providing every
11 day. Our offerings include a great variety of pricing
12 options, as well as energy efficiency and load control
13 products and services, all working off the robust
14 electricity and natural gas markets here in the state.

15 In our comments on the interim report, we
16 offered three recommendations that we feel were
17 essential for the state to reach its clean energy goals.
18 RESA was pleased to see that the draft State Energy Plan
19 also supports these concepts, and I congratulate you on
20 the work you have done up to this point with the finish
21 line certainly in sight for all of you.

22 What we would ask is that we endorse a more
23 explicit statement of these three principles or these
24 three recommendations in a final State Energy Plan.

1 And just briefly, these three principles are:

2 Number one, continue to foster competitive retail and
3 wholesale energy markets. The wholesale and retail
4 markets are directly linked. A workable, competitive
5 wholesale market produces the appropriate price signals
6 and hedging mechanisms that facilitate the deployment of
7 new and innovative products, such as efficiency and
8 demand response offerings, within the competitive retail
9 markets.

10 Number two, New York should continue to
11 expand the use of market-reflective hourly pricing for
12 electricity as the utility to default service. As
13 utilities deploy advance meters, their additional
14 time-differentiated capability should be utilized to
15 price electricity in New York.

16 The additional functionality will increase
17 customer awareness of the value of the electricity they
18 consume, and help drive changes in customer behavior
19 that are essential to achieving the state's goals for
20 energy efficiency and demand response.

21 And finally, New York should support an
22 aggressive rollout of advanced meters and time-sensitive
23 rates. Since the release of the interim report, much
24 progress has been made toward the goal of integrating

1 wholesale and retail prices in real time.

2 The Public Service Commission has endorsed
3 cost recovery for an approved series of Smart Grid
4 projects to be deployed by New York State utilities with
5 a total cost of about \$825 million and ratepayer
6 matching funds of approximately \$390 million. The rest
7 of the funding is being sought from the American
8 Recovery and Reinvestment Act funding through the US
9 Department of Energy.

10 These programs, along with those submitted by
11 LIPA and NYPA to DOE, are a promising start to the
12 adoption of time-sensitive rates as the rule, rather
13 than the exception, in New York State.

14 RESA will continue to be in the forefront of
15 offering new products and services to customers, and
16 underlying value added products and services to
17 customers of all sizes, and advanced metering
18 infrastructure and other technologies that are being
19 supported by the state and being pursued with the
20 federal government. As long as they are being deployed
21 and continue on that path, we will continue on that
22 path.

23 Again, congratulations.

24 MR. CONGDON: Our next speaker is Paul Powers

1 from Empire Advocates and also representing Deepwater
2 Wind.

3 MR. POWERS: Good afternoon. My name is Paul
4 Powers. I'm a consultant to Empire Advocates and I'm
5 here to deliver the comments of Deepwater Wind, it's a
6 firm with which we do business and they were not able to
7 attend today at the last minute.

8 I want to congratulate you. I know how
9 rigorous this process is. We're in the home stretch.
10 It's a wonderful job, well done. All the analysis and
11 especially the openness of the process as it was
12 conducted was really remarkable. Congratulations to you
13 all.

14 Deepwater Wind, LLC is the US leader in
15 offshore wind power development, and we are very pleased
16 to submit these comments today to you all. Deepwater
17 Wind is increasing American energy independence with
18 large scale wind farms in deep ocean waters, where they
19 are virtually invisible from shore.

20 As renewable energy developers, Deepwater
21 Wind agrees with the fundamental conclusions of the
22 draft State Energy Plan that the best plan for meeting
23 the state's present and future challenges is through the
24 development and build out of its clean energy

1 industries.

2 We also respectfully submit that the
3 emergence of a viable offshore wind industry with
4 significant environmental and economic implications,
5 especially for southern New York State, has yet to be
6 fully reflected in New York State's energy planning.

7 We understand the difficulty in trying to
8 assess the contribution that offshore wind can make to
9 the state's resource mix, given the many uncertainties
10 that arise in developing this new capacity. However, we
11 are confident that the draft State Energy Plan can count
12 on 1500 megawatts of offshore wind over the next 10
13 years.

14 The draft cites the La Capra study from last
15 year in assessing the practical potential for offshore
16 wind, and that study predicts 534 megawatts by 2015.
17 While we believe that this figure could be accurate, we
18 see substantially more offshore wind coming on line over
19 the 2014 to 2020 time frame, depending on federal and
20 state permitting, equipment availability and other
21 factors.

22 In particular, the existence of a very
23 substantial wind energy resource just offshore of New
24 York Independent System Operator load zones J and K

1 raises the possibility of generating significant amounts
2 of electric energy to directly serve customers in New
3 York City and Long Island, which are areas previously
4 thought to be out of reach of large scale renewable
5 generation.

6 So, we would like to offer the following
7 information and recommendations and five points. The
8 first point: Deepwater Wind commends the state for
9 initiating processes leading to the acquisition of
10 offshore wind, and we have submitted a response to the
11 Long Island - New York City Off-shore Wind Project
12 request for information.

13 Their response included a number of
14 recommendations. I want to high light three of these
15 here. Under the project, Deepwater Wind believes the
16 request for proposal should include no prescriptive site
17 selection for the project itself; no specified
18 interconnection point, and award multiple power purchase
19 agreements. They believe the process should leave a
20 good deal of these factors to be developed by the
21 applicant.

22 They think if the state adheres to these
23 recommendations that the project should proceed at least
24 cost to ratepayers.

1 Point two, Deepwater Wind believes that the
2 state should further recognize the regional economic
3 potential for offshore wind by adopting modifications to
4 the renewal portfolio standard program that will help
5 support this industry in a time of extremely volatile
6 market prices and high regulatory risk.

7 In recognition of the higher value that
8 offshore wind represents to the downstate region, the
9 final State Energy Plan should recommend that the Public
10 Service Commission amend the RPS program in order to
11 directly support offshore wind projects that
12 interconnect into zones J and K.

13 This support might take the form of an
14 offshore renewable energy credit program that gives
15 greater RPS value for renewable credits generated
16 offshore; or in the form of an incentive return offered
17 to electric utility companies that enter into long-term
18 power purchase agreements with renewable energy
19 facilities interconnecting directly with New York City.

20 This type of incentive is being adopted in
21 other states and is supported by recent research
22 conducted by the New York City Department of Economic
23 Development. That study found that, of the alternatives
24 investigated, offshore wind held the greatest potential

1 economic benefits by far, and that, although the
2 technology's construction costs are also high, it
3 deserves more analysis and deserves support.

4 Point three. Offshore wind, by virtue of its
5 vast potential, is uniquely positioned to become a
6 significant solution to the state's greenhouse gas
7 control plan, not only in the production of electricity,
8 but also in the displacement of fossil fuels used in
9 powering the building and transportation sectors.

10 In fact, offshore wind represents the single
11 largest potential source of renewable energy for the
12 transmission-constrained region of Southeastern New
13 York.

14 As advances are made in the field of energy
15 storage and conversion, the tremendous potential for
16 offshore wind stands poised to energize buildings and
17 vehicles, helping to lower the state's carbon footprint.

18 Quickly, point four. With regard to
19 transmission expansion, Deepwater Wind urges the state
20 to consider the size of potential resources of renewable
21 power, including offshore wind, before underwriting
22 significant expenditures beyond what is necessary for
23 reliability and what would otherwise be economic.

24 And point five. Deepwater Wind is pleased

1 that the draft supports the effort of the Mid-Atlantic
2 Regional Council on the Ocean. We know that Governor
3 Paterson was instrumental in the formation of this body,
4 and we commend his vision for it.

5 Thank you very much for allowing us to
6 provide these comments to you today. And, again,
7 congratulations.

8 MR. CONGDON: Thank you, Paul.

9 Our next speaker is Anthony Campagiorni from
10 Central Hudson Gas & Electric.

11 MR. CAMPAGIORNI: Thank you for the
12 opportunity. My name is Anthony Campagiorni from
13 Central Hudson Gas & Electric.

14 Central Hudson represents approximately
15 370,000 natural gas and electricity customers in the
16 counties of Ulster, Dutchess, Orange, Putnam, Greene and
17 Columbia Counties in the region.

18 Central Hudson is supportive of the plan's
19 framework to reliably meet the state's future energy
20 needs in a cost effective and sustainable manner.
21 Central Hudson also supports the plan's five broad
22 policy objectives.

23 Our company commends the planning board for
24 offering specific recommendations to meet the plan's

1 goals, but firmly believes that a focus on the best
2 recommendations needs a detailed implementation plan to
3 achieve the required results.

4 Central Hudson has two overarching concerns
5 with the draft State Energy Plan. One, there should be
6 a greater role for utilities in achieving the policy
7 objectives as set forth in the plan. And two, the plan
8 must address how to realistically achieve the plan's
9 goals in a very cost effective manner.

10 Currently, the plan does not incorporate
11 utilities as a primary resource to meet the state's
12 energy plan goals. We believe this is unfortunate, as
13 utilities touch nearly every customer in New York State,
14 enjoy largely the trust and confidence of their
15 customers, and can best accomplish these goals at the
16 lowest cost to customers with our skills, knowledge, and
17 capabilities.

18 Second, the plan must detail in a realistic
19 way the state's true cost to achieve many of its
20 recommendations. The state cannot afford the
21 continuation of existing policies and programs without
22 commensurate benefits that may increase energy prices,
23 thus driving additional businesses from the state.

24 The maintenance of a robust, reliable and

1 safe electric grid is perhaps the most critical
2 component of our company's business. Central Hudson
3 continues to make annual investments of approximately
4 \$60 million a year to provide reliable, safe service in
5 a cost effective manner. Even so, the aging
6 transmission grid will require further investment in the
7 future.

8 In order to address some of these future
9 challenges, Central Hudson views smart grid as a
10 potentially cost effective tool to mitigate long term
11 infrastructure needs.

12 Central Hudson has proposed several smart
13 grid initiatives within the service territory. Our
14 company has also submitted projects with the other
15 utilities in New York State -- NYPA, LIPA and the NYISO
16 -- for funding under the federal stimulus plan.

17 The statewide collaborative included the
18 installation of capacitors at key locations across the
19 state to improve the efficiency of the grid and the
20 installation of phasor measurement units that will
21 provide situational awareness and monitoring of the
22 transmission network.

23 In addition, Central Hudson is engaged in an
24 advanced metering pilot program that we filed directly

1 with the Department of Energy, with a match funded by
2 the Public Service Commission. Studying the full
3 benefits of smart grid will take some time before the
4 cost-benefits analysis can be completed. Our company
5 also recommends that the State Energy Plan support
6 interoperability standards in the deployment of smart
7 grid.

8 Central Hudson believes that the emphasis
9 must be placed on energy efficiency programs, especially
10 when they represent the least cost, fastest means of
11 achieving one of the State Energy Plan's goal of
12 reducing electricity usage by 15 percent by 2015.

13 Central Hudson commends the plan's
14 recommendations that all state agencies, authorities and
15 utilities that administer energy efficiency programs
16 consistently measure and report results of efficiency
17 programs. Under such a cost-benefit approach, customers
18 can be confident of the best return for their money.

19 Central Hudson has recently initiated an
20 energy efficiency program and we believe that it can
21 achieve better energy efficiency results more cost
22 effectively than NYSERDA, since Central Hudson has the
23 most direct, consistent, and ongoing contact with its
24 customer base, and can better penetrate that customer

1 base.

2 The draft State Energy Plan should also
3 encourage utility-scale renewable generation investment
4 in order to meet the state's energy and environmental
5 policy goals. The draft plan should allow utilities to
6 propose generation solutions, such as rate based
7 renewable generation.

8 Utility scale renewable generation, such as
9 solar, for instance, is the most cost effective way to
10 deploy solar technology and meet the state's goals for
11 renewables. Allowing utilities to become involved in
12 this renewable generation would benefit the greatest
13 amount of customers in the most cost effective manner.

14 Utilities could site renewable generation to
15 minimize the costs of interconnection, as well as
16 minimize the system impacts on the reliability of the
17 grid tied to the installation of larger systems on the
18 distribution system.

19 Utility involvement in renewable generation
20 could help the state meet many of its goals, including
21 its environmental goals of purchasing more green,
22 environmentally friendly power, as well as accelerating
23 the state into a leadership position in renewable
24 generation.

1 Central Hudson believes that in meeting the
2 goals of the State Energy Plan, the plan must
3 realistically address how to achieve its goals in a cost
4 effective manner.

5 The plan should disclose the costs associated
6 with meeting some of the state's goals, such as
7 procuring 30 percent of New York's electricity demand by
8 2015, or reducing greenhouse gases by 80 percent by
9 2050.

10 There is a need to assess the current
11 renewable portfolio standard, systems benefit charge,
12 and the regional greenhouse gas initiative-funded
13 programs to ensure they are streamlined so that a
14 minimum amount of customer dollars are collected and
15 then spent in the most cost effective manner.

16 To date, Central Hudson customers have sent
17 payments of over \$73 million through the SBC and RPS
18 without direct, definitive success of these programs in
19 its territory.

20 Central Hudson customers also pay for the
21 regional greenhouse gas initiative indirectly through
22 the higher costs of their commodity prices. These
23 program dollars must consistently be monitored to assure
24 the benefits of the programs.

1 Thank you for the opportunity to speak

2 MR. CONGDON: Thank you very much.

3 Our next speaker is Bob Seeger from the
4 Millwright Local 740.

5 MR. SEEGER: Good evening. I would like to
6 thank you again for the opportunity to speak. My name
7 is Bob Seeger. I serve as the Business Manager for
8 Millwright Local 740 based in Woodhaven, Queens. Local
9 740 covers an area of New York City, Long Island, and
10 the northern suburbs of Westchester, Rockland, Putnam,
11 Dutchess and Orange counties.

12 Union millwrights from my local install,
13 repair and replace and dismantle the machinery in heavy
14 equipment in many of the industries, including power
15 plants. Our members are very highly trained and skilled
16 professionals who work within tolerances of 1,000th of
17 an inch, which is half the thickness of a human hair.

18 Millwrights are also very active in the
19 debate regarding our energy future. With our experience
20 and extensive knowledge within this field, millwrights,
21 such as myself, are interested in building an energy
22 future that is truly sustainable. This is one of the
23 key reasons why millwrights, such as myself, have
24 monitored the construction and release of the proposed

1 State Energy Plan.

2 I would recognize yourself and your Energy
3 Planning Board for constructing a comprehensive energy
4 plan, and for facilitating public meetings where
5 interested members of the public can weigh in with their
6 thoughts.

7 There is certainly much to like within the
8 proposed plan, including the development of new wind
9 energy, support for extracting natural gas from the
10 Marcellus shale formation, supporting the reorganization
11 of the power plant siting statute, and the list goes on.

12 The proposed plan is largely solid, and
13 certainly benefits New York's reputation as a
14 progressive entity. However, I do have some concerns
15 that I would like to share with you.

16 First, the plan does not truly support the
17 creation of new base load power generation, a concern of
18 the millwrights, and an even greater concern when
19 evaluated against the reliability of the grid. This
20 concern is heightened in light of the plan's support for
21 closing Indian Point. This proposal should be withdrawn
22 immediately.

23 The proposed plan does provide support for
24 nuclear power in general, and even supports the creation

1 of a new reactor in upstate New York. These are points
2 that I would not argue with, but would rather
3 congratulate you on.

4 However, the basis for which you ruled
5 against Indian Point is not based in science nor is it
6 based in reason, and that is truly unfortunate. The
7 proposal to propose closure of Indian Point is under the
8 blanket of safety and environmental concerns; however,
9 the Nuclear Regulatory Commission in the past several
10 weeks stated that Indian Point passed its own rigorous
11 safety test as part of its license renewal.

12 If Indian Point was truly an environmental
13 hazard, that would certainly come as a shock to the
14 scores of fishermen, outdoor enthusiasts, and the
15 recreationalists who utilize the Hudson River near the
16 facility on a daily basis.

17 As someone who has spent significant period
18 of time working at the facility, I know these facts
19 firsthand. Indian Point is also a union workplace, with
20 my union brothers and sisters involved in nearly every
21 aspect of maintaining the facility.

22 During scheduled outages, skilled union trade
23 representatives, such as the millwrights, are the ones
24 called upon to modernize the facility's infrastructure

1 and keep the plant running smoothly.

2 And finally, let's use some common sense.
3 Removing more than 2000 megawatts, a figure that can
4 make up nearly one tenth of the state's total power
5 supply, without having a clear plan for replacing this
6 base load power, is a recipe for disaster. It will
7 leave our grid vulnerable and place all New Yorkers at
8 risk for another blackout. This is a prospect we cannot
9 afford.

10 As you construct the final energy plan, I
11 urge you to consider these arguments to fortify what is
12 largely a positive plan. As a region continuously
13 growing and demanding new power, we must do what is
14 necessary to address these issues. Safeguarding our
15 current base load portfolio, including Indian Point, is
16 a critical part of this effort.

17 I would also just like to add one thing, and
18 that is that a lot of people think that people in my
19 position come up here because we're only interested in
20 the jobs and the money. There are worse motives to
21 have. That's one of them.

22 But I know the members of my local, and I
23 know their families. I get to meet their kids at
24 picnics. I don't want to go back to any wife and tell

1 them that something could have happened to their
2 husband.

3 I have worked in that plant, particularly at
4 Indian Point, since 1978. The plants that were built in
5 the '70s are not the plants that are there in 2009.
6 They have had an enormous amount of upgrades. They are
7 different utilities. Particularly, Entergy owns them
8 now and has spent lots of money to make them safe.

9 I, myself, live 16 miles from the plant. If
10 I didn't believe that it was safe I wouldn't be here. I
11 wouldn't be there.

12 And I just wanted to clear up the point that
13 it is not just about money and jobs. The people that
14 work in that place need to know that it's safe, and they
15 do.

16 Thank you again very much for your time.

17 MR. CONGDON: Thank you very much.

18 Our next speaker is Steve Ludwigson from the
19 Boilermakers.

20 MR. LUDWIGSON: Good evening. My name is
21 Steve Ludwigson, and I am the Assistant Business Manager
22 for Boilermakers Local 5. I am also a resident of
23 Milton, which is about 25 minutes from here. My
24 daughter attends school here and my second oldest was on

1 the Youth Symphony here for three years. So, I'm happy
2 to be back here and it's not costing me any money
3 tonight.

4 I would like to begin by congratulating the
5 Governor and all of you for taking the step of actually
6 proposing the State Energy Plan. No matter how you
7 slice it, this alone is a positive step, and one for
8 which you should all be commended.

9 Then there is the proposal plan itself. The
10 plan itself has a number of items which are clearly
11 worthy of recognition. In particular, I would point out
12 the plan's support for using stimulus funds to develop a
13 new generation of green jobs, as well as supporting the
14 passage and implementation of a new power plant siting
15 law is of particular interest to organized labor.

16 As you know, the absence of a siting law,
17 such as Article X, had placed New York at a competitive
18 disadvantage, and with energy demand continuing to grow
19 we need a mechanism to fast track approval for new
20 sources of power. A law such as this will do just that.

21 Additionally, your support for modernized
22 transmission, construction of the Smart Grid, support of
23 the Jamestown Oxy Coal facility, development of the
24 Marcellus shale formation, and support for the third

1 nuclear reactor at Nine Mile Point, can and should be
2 recognized.

3 I would also like to point out some concerns
4 shared by myself and my fellow boilermakers. First,
5 let's talk about energy conservation, efficiencies,
6 renewable energy and renewable development. They are
7 all important causes, but facts are facts, and you
8 cannot replace the need for additional base load energy
9 capacity.

10 Closing existing plants while the ISO
11 projects increased demand, even with the implementation
12 of renewable and conservation, is clearly unwarranted
13 and ill-advised.

14 Secondly, we are extremely disappointed in
15 the plan's support for closing the Indian Point nuclear
16 power plant. If implemented, this would foster a
17 devastating impact on our community, as well as for all
18 New Yorkers.

19 Indian Point is a safe facility. The
20 preliminary State Energy Plan cites safety as a top
21 reason for opposing Indian Point's continued operation.
22 A union's main purpose is to negotiate both good wages
23 and a safe working environment for its members.

24 I am here to tell you that Indian Point has

1 consistently shown a rigorous commitment to safety of
2 not only our workers, but members of the surrounding
3 community. I've worked there. I know this.

4 Going off the script, I have one case and
5 ex-Senator Hillary Clinton was there for a review with
6 some of her aides. She was actually denied access
7 because one of the aides was standing too close to her
8 and I had an iodine injection which was radioactive, so
9 as she went to go through a monitor it set it off.

10 A lot of places would just wave the person
11 through because they are a VIP. Nobody entered that
12 plant until it was cleared up. So, they are very
13 stringent and they follow their procedures.

14 As Bob said, I wouldn't feel comfortable
15 sending my people in there if I didn't think it was
16 safe.

17 The federal assessment of Indian Point's
18 license renewal application has gone on for almost two
19 and a half years now. The Nuclear Regulatory Commission
20 just issued its final safety evaluation and concluded
21 that there are no concerns that would preclude license
22 renewal for an additional 20 years of operation.

23 The NRC doesn't simply hand out favorable
24 safety ratings. Indian Point has literally been put

1 through the ringer to prove it's safe. In 2008, the NRC
2 devoted approximately 16,700 hours inspecting Indian
3 Point, including seven major team inspections. Indian
4 Point was rated "green" for performance, which is the
5 best grade under the NRC system.

6 In conclusion, in addition to being safe,
7 Indian Point is also environmentally friendly, union
8 friendly, and a major economic engine in the Hudson
9 Valley and New York's downstate region. The plant is
10 responsible for more than 10,000 extended jobs and more
11 than a billion dollars in economic impact on our region.

12 Allowing the closure of Indian Point would
13 deny the conclusions of independent safety experts,
14 overlook the commitment to safety by union workers at
15 the plant, and would defy basic common sense.

16 Ladies and gentlemen: The proposed plan is
17 largely solid and offers many strong proposals for
18 securing our energy future, but like any proposal, it
19 can be improved, and in this case, it must be. This is
20 why I urge you to support the continued operations of
21 Indian Point as part of the final energy plan.

22 Thank you for your time.

23 MR. CONGDON: Thank you very much.

24 Mr. Ludwigson was our last speaker on the

1 list, but if anyone else in the audience would like an
2 opportunity to speak, feel free to come up to the
3 microphone now.

4 Seeing none, that will conclude today's
5 hearing. Our next public hearing is on Saturday in
6 Utica, and that will be our last hearing.

7 I want to remind everyone there is also an
8 opportunity to provide written comments and those are
9 due October 19th.

10 Thank you all very much for your attendance
11 today.

12 (Hearing concluded.)

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