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HEARING OF THE DRAFT STATE ENERGY PLAN

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Hunter College, 69th Street
New York, New York

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11:00 a.m.

B E F O R E:

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A P P E A R A N C E S:

HEARING

MR. CONGDON: Good morning, everyone. My name is Tom Congdon and I am the chair of the New York State Energy Planning Board. I'd like to welcome you all to the second public statement hearing on the Draft State Energy Plan.

I'd also like to thank our hosts at Hunter College and our other members of the Planning Board who are here with me today. Starting at my far left, Judith Enck is our Deputy Secretary for the Environment in the Governor's Office; Pete Grannis is the Commissioner of the Department of Environmental Conservation; Garry Brown is the Chair of the Public Service Commission; and Bob Callender is here from NYSERDA as the designee for our NYSERDA rep Frank Murray.

Most important, I'd like to thank you for coming here today. We're here to listen to you. For the past year and a half, the Planning Board has worked

with the staffs of ten agencies and public authorities to develop the State Energy Plan.

The planning process commenced in April 2008 when Governor Paterson issued Executive Order No. 2 which created this Planning Board and charged us with developing the Plan.

On August 10th the Planning Board released the Draft Plan on its website nysenergyplan.com, and we commenced a 60-day written comment report and the public hearing phase of developing the final Plan. Written comments are due on October 19th, and we will release the plan, the final Plan, by the end of the year.

The Plan's objectives are to first, ensure our energy systems are reliable over a 10-year planning horizon; second, to reduce greenhouse gas emissions; third, to stabilize energy costs and improve economic competitiveness in the State; fourth,

reduce public health and environmental risks associated with our energy systems; and fifth, to improve the State's energy security.

The plan modeled and considered various approaches to achieving these objectives and arrived at a number of strategies outlined in the Plan. First and foremost, the Plan identified energy efficiency as a priority resource to meeting our multiple objectives.

Second, the Plan seeks to develop in-State energy resources, largely renewable resources and also in-State national gas resources in an environmentally responsible manner.

Third, the Plan projects infrastructure needs, both to support the clean energy technologies of the future and to ensure reliability.

Fourth, the Plan identifies opportunities to capitalize on existing academic and research strengths in the State and to speed up the

commercialization of new energy technologies.

The Plan also identifies needs for a clean energy workforce and identifies new opportunities for training for clean energy jobs, and we've also identified economic development strategies to help attract those industries that will thrive in a carbon-constrained economy.

Last, the Plan recognizes that none of this can be fully achieved without working with other levels of government and communities to achieve our goals.

This public hearing is a testament to the desire to work with and learn from communities that are affected by energy decisions and energy policies.

This is one of nine public hearing sessions we will hold around the State to hear your comments. A full hearing schedule is available on our website.

HEARING

My job today is to gather information for the Planning Board to consider, and again, we are very appreciative of your attendance today.

The process is simple. Those who want to comment at this hearing can ask to sign in upon approval today. I have a list of names here. Your name will be called one at a time to speak. Please come to the microphone here in the aisle. Come to the microphone when your name is called.

A court reporter is here to provide us with a verbatim transcript. It's very important that there be only one speaker at a time so the reporter can hear clearly. Speakers should address their comments in the direction of the microphone, and please make an effort to speak clearly and slowly.

It's very important that those in the audience be courteous to the speaker so his or her comments can be transcribed accurately. All speakers

are asked to focus on issues that pertain to the Draft Plan. Your comments should be as succinct as possible so we can hear from as many people as possible.

We have set a five-minute deadline for that purpose, and one of my colleagues, Jennifer Kozlowski is on the end sitting next to the microphone. She'll give you a gentle reminder if you are getting close to the five minutes or if you go over.

Those who want to comment but do not want to speak publicly or do not get a chance to do so can also submit written comments via our Energy Plan website. All public comments, whether stated at a hearing like this one or sent into the website, will be reported to the Energy Planning Board for its consideration and they all count equally regardless of how they were received.

With that, does anyone have any questions about the process?

HEARING

(No response.)

MR. CONGDON: So we can get started. Our first statement is from Paul Vitale from Business Council of Westchester. Paul?

MR. VITALE: Good morning. I'm Paul Vitale, Vice President, Government and Community Relations for the Business Council of Westchester. I appreciate the opportunity to address the Planning Board today at this hearing.

The Business Council of Westchester is the county's largest and most influential business organization. We represent approximately 1200 members ranging in size from multi-national corporations and mid-sized businesses to professional firms, not-for-profit organizations, and small business owners in every sector of the county's diverse economy.

The Governor's Draft 2009 New York State Energy Plan contains many positive initiatives that are good for

business and good for New Yorkers. Among the items it supports are revitalized power plant citing law, construction of new transmission infrastructure that utilizes existing right of way and additional investment in research and development of renewable energy and workforce training for a new generation of green-collar jobs. These are all positive developments which our business organization clearly endorses.

Despite these many positive developments we are extremely disappointed that you have decided you want to shut down the Indian Point Nuclear Power Plant. The Business Council of Westchester believe that this is a short-sided recommendation, which would create a devastating impact on our community, as well as for all New Yorkers.

First, Indian Point is a safe facility. The preliminary State Energy Plan cites safety as a top reason for

opposing the State's -- the plant's continued operations. However, for our members who live and work within the vicinity of the plant, they know that Indian Point is indeed a safe facility.

They are -- they see the plant as vital fortress, a virtual fortress, and are reassured by the heavily armed presence throughout the plant's perimeter and even outside it. They know that the plant is the most scrutinized of all U.S. nuclear power plants.

Safety is always the top priority for all involved at Indian Point, and they know that the federal government's independent safety experts just last week attested to the safety and security of the facility by issuing a favorable final safety evaluation report. This is a significant and important step forward in the plant renewal process -- license renewal process.

Next I want to talk about Indian

Point as a good environmental steward. Indian Point is not just a safe facility, it is key to New York's success under the regional gas -- greenhouse gas initiative and will be a critical factor towards ensuring compliance under the federal cap and trade legislation.

Indian Point produces more than 2,000 megawatts of power, clean and virtually emissions-free energy. It is a critical component to New York achieving the distinction of having one of the lowest per capita carbon emissions counts in the nation.

Replacing Indian Point's energy through conservation, efficiencies, and construction of a natural gas facility is unrealistic and wishful thinking. Even with conservation efficiencies fully employed in New York, the New York State Independent Systems Operator continues to forecast growing energy demands throughout this year and into

the future, and it will take a minimum of four natural-fired gas plants to make up for Indian Point's power. This will result in more airborne pollutants, which will force for a negative impact in our community.

Now I want to touch on Indian Point as an economic engine. Now that the State independent safety experts have further judged Indian Point to be safely operated to the highest standards, we most focus on the economic benefits of this plant.

Conservatively Indian Point accounts for $1 billion a year in local economic activity. Studies have shown that closing Indian Point would lead to more than 11,000 job losses and a total loss in the region exceeding $2 million in cumulative lost wages.

A study conducted by the Business Council of Westchester and three of our business organizations and released last year indicates that closing Indian Point

would lead to energy costs rising by as much as 150 percent. With New York's energy cost already well above the national average, a factor routinely cited by our members as one of the key stumbling blocks in their efforts to grow and prosper, forcing utility rates to rise by 150 percent would bring about economic devastation to the entire downstate region, not just Westchester.

In conclusion, there is much in the Plan to praise and recognize, but the Plan's focus on shutting down Indian Point will bring about far-reaching implications that will adversely affect all New Yorkers. Moreover, no realistic or credible alternatives to replacing Indian Point have been made in the wake of this study. This is both irresponsible and ill-timed.

To say that Indian Point is the backbone of our electricity network and a critical economic engine for the Hudson Valley's economy would be a vast

understatement. Given the current economy with high prices and record job losses, who in their right mind would support closing a safely run power plant that emits virtually no carbon into the atmosphere and employs hundreds of people who keep it safe? Thank you.

MR. CONGDON: Thank you, Paul. Next speaker is James Van Nostrand from Pace Energy.

MR. VAN NOSTRAND: Good morning. I'm Jamie Van Nostrand, the executive director of the Pace Energy and Climate Center. We're formerly known as the Pace Energy Project. We've been around for 20 years and have been very active in the energy environmental issues in New York, promoting energy efficiency, renewable distributed generation. Our latest project is working on the biofuels road map. We're the lead institution on the team with the biofuels road map.

We really appreciate the

opportunity to address the board. I think we appreciate the really outstanding work that, I think, has been done and the institutions that are represented and included in the State Energy Plan, together with the hard work that's been done by Tom Congdon and Sarah Osgood, John Williams, Judith and Peter Iwanowicz.

I think we feel generally very good about the caliber and capability of the officials at the State level who are in charge of our energy environmental program. The Draft State Energy Plan, we think, does a really good job of laying out the broad structure, principles, and policies for us to have a reliable and sustainable energy infrastructure and supply going forward.

I got to say we're very pleased with the Governor's Executive Order No. 24 that was issued a couple weeks ago in terms of endorsing an ‘80 by 50,’ a reduction in greenhouse gases by 2050.

I think it's very important that we view this Energy Plan -- although it's a ten-year scope for the Energy Plan -- that we view it in the context of instituting achievable lower carbon levels and get a meaningful reduction in greenhouse gas emissions. So we're going to need to address the climate change issues.

Another aspect of that is the climate action plan and creating of the climate change council, we think, is another very important piece. So that -- and I think along with that is making sure that climate action council has the resources to be able to do the modeling and analysis that are going to be necessary to produce a good climate action plan and to be able to produce the metrics so that we can gauge from time to time how we're doing in implementing that climate action plan. That's just a great move that -- in terms of exercising the issue upon the

‘80 by 50’ issue.

We know from some of the meetings we have had that there's been a lot of modeling done already on that issue, and I think it's great that the Energy Plan is evaluated in that context of this bigger, longer-term objective.

I guess turning to some of our concerns about the State Energy Plan -- and again, I think it needs to be evaluated in the context of our -- generally we think it's a great policy and represents a lot of hard work by a lot of good people.

What we're concerned about is sort of the -- it's never been a problem of identifying these bigger policy objectives in the longer-term goals. I guess the concern we have is the sense of urgency when it comes down to actually implementing these objectives and the plan.

I mean, the energy efficiency portfolios counted at ‘15 by 15’ is a

great objective. The RPS of 25 by '13, now growing 30 by '15, again, these are really good goals. I guess our concern is the pace at which these measures are being implemented.

I think on the energy efficiency, for example, when you look at the fact that the New York ISO reliability need assessment is anticipating only 28 percent of that energy efficiency can be counted on showing up is some reflection of the sort of pace at which these programs are being approved and funded.

I understand there's, you know, some measurement and evaluation issues that the New York ISO has. There's always that conservatism of the power engineers not being sure that those energy efficiencies are going to actually show up, but I think the fact that less than a third of what we're projecting by ‘15 by 15’ is being counted upon by the New York ISO is pretty revealing that we're not moving fast

enough and that the sense of urgency that's embodied by the Government Executive Order, including ‘80 by 50’, is not being sort of carried through at the -- when it comes to actually implementing the programs to get us there.

I think ‘30 by 15’ as well -- I mean, the Governor announced back in February that we're going to accelerate to new portfolio standard to ‘30 by 15’ and that has still not been formally adopted as the policy of the State, and it may not happen until the end of the year.

One of the things you look at in the State Energy Plan is it's actually not all that ambitious a goal when you look at the net megawatts that are actually stimulated by even a ‘30 by 15’ standard. It's not all that aggressive.

I think another thing to look at in the State Energy Plan are the wholesale rate impacts of implementing

energy efficiency and RPS, the fact that they will produce a reduction in the wholesale prices and those reductions more than offset the impact of higher prices at the retail level is -- makes it all the more disturbing we can't get there more quickly.

Obviously rate impacts are something to be concerned about when implementing the energy efficiency and renewable portfolio standard, but if they are more than offset by reductions in the wholesale market, given the market clearing price mechanism we have in New York, why can't we, you know, move more quickly? And I think that's -- that sort of jumps out at you from the State Energy Plan as well.

I understand the tremendous workload of the Public Service Commission. I was at the hearing a couple weeks ago when they rolled out the smart grid program. I think that was just an amazing amount of work in a

very short amount of time and allows New York ratepayers to take advantage of the Economic Stimulus Package, and it's issues like that that continue to come before the PSC that represent a great workload.

I know there has to be a balance between prevision and speed and making sure we're spending this money wisely. I think we would urge that balance be struck a little bit more in favor of speed, getting the program approved, get the money out the door, measure, verify, and refine, but let's have the same sense of urgency in implementing the State Energy Plan that we have at the policy level and announcing these laudable and appropriate goals. Thank you very much. I appreciate all the good work you've done and the opportunity to address the board.

MR. CONGDON: Thank you. Our next speaker is Ross Gould from the New York State Sierra Club.

HEARING

MR. GOULD: Good morning. Thank you for having these hearings. As you said, my name is Ross Gould and I am an attorney and a member of the Sierra Club's Atlantic Chapter. In addition, I work with several other nonprofit organizations on issues relating to production and consumption of energy and the environmental and public health impacts of the production and consumption of energy.

Initially I note that the State Energy Plan is a welcome opportunity for New York State to move forward with a safe, sustainable, energy independent future and can be used to stimulate employment and overall economic growth, and I applaud the effort that's being made on that, as does the Sierra Club.

There are many positive aspects of the Plan, including the goal of attacking climate change, and we do appreciate those efforts. But that being said, there are numerous

shortcomings with the Draft State Energy Plan, including not reaching for higher energy efficiency standards and not enough reliance upon renewable energy and the failure to include options, such as tidal generation of power. For example, the East River is using tidal and that has not been mentioned in the Energy Plan.

In an effort to be brief, I will discuss three areas of concern. Written comments will be submitted to supplement this testimony, as well as I believe other people will be making comments as well on other issues.

The three issues I will touch upon are one, the State Draft Energy Plan's mistaken dependence upon producing large amounts of energy from the use of natural gas extracted from the Marcellus Shale; two, an energy future that includes nuclear electricity generation; and three, the failure of the Energy Plan to consider the

interconnection between water and energy and how the smarter water resource management decisions can lead to a huge decrease in energy demand.

Initially, I would like to state that the amount of recoverable reserves from the Marcellus Shale are being overstated, and in fact a World Oil Magazine article published earlier this month states that the reserves for similar shale plays have been overestimated and much less is actually recovered than has been estimated by the industry.

Also, the Draft Energy Plan mistakenly considers both natural gas and nuclear energy to be clean sources of energy. They are anything but, and although many people advocate that natural gas and nuclear are viable options because they emit CO2 in generating electricity -- sorry, less CO2 in generating electricity then do coal or oil, this statement only

discusses one point of the full life cycle of energy production and hides the full health and environmental impacts as well as the social injustice associated with these processes.

The extraction of natural gas is very dirty, and in states in which a similar drilling process is used as is planned in New York, a process called hydraulic fracturing with horizontal drilling, there are numerous cases of severe illnesses from water contamination and air pollution.

These individuals who are suffering these illnesses and the water contamination are individuals from environmental justice communities because they are residents of economically depressed communities.

Drilling for natural gas destroys air quality. In fact hydraulic fracturing with horizontal drilling has been taking place in Fort Worth, Texas, in what is known as the Barnett Shale,

which is a similar formation as what we have with the Marcellus Shale.

A recent study of air quality at Fort Worth, Texas, has shown that drilling-related emissions of carbon dioxide and two other major greenhouse gases underlying climate change were estimated to be roughly equivalent to the impact from two 750 megawatt coal-fired power plants.

This number will be -- is much lower than what would result under the Draft Energy Plan because the Marcellus Shale is much larger, and the drilling that is expected is supposed to be much more intense than that which is occurring in Fort Worth.

In addition, the same study concludes that peak summertime emissions of smog-forming emissions from production activity in the Barnett Shale are about the same as the emissions from all the cars and trucks in the Dallas/Fort Worth Metroplex.

HEARING

As documented in the Draft State Energy Plan, 85 percent of New York's population lives in areas that have been designated as -- as not in attainment of one or more of the national-based air quality standards. Surely such emissions as found in Dallas/Fort Worth will not help decrease this number.

In addition, the Draft State Energy Plan calls for major increase in pipeline and other infrastructure for bringing natural gas to downstate areas. The impacts of pipelines on the landscape, especially with the uniformly broad sheet formation like the Marcellus Shale, will be significant.

The vast gridwork, transmission lines, pipelines, and compressor lines will directly contribute to air quality issues through leakage, destroy land character, lead to habitat fragmentation and become conduits for endangered species. In addition, the placement of the infrastructure is also likely to

decrease property values.

Next, the Plan takes -- next the Plan discusses nuclear energy, and we do agree that Indian Point should be shut down and we applaud you for that; however, we disagree with the increase in nuclear generation overall. Nuclear power is not as clean as is stated.

One quick point I'd like to make, as my time is up, is that one thing that's not being considered is the environmental justice impacts relating to the uranium mining and milling, which affects the Native American communities disproportionately more than anyone, and by increasing our reliance on nuclear power will severely impact this community. And they have had very little voice in this. I realize my time is up. As I said, we will be submitting additional comments. I thank you.

MR. CONGDON: Thank you. Next speaker is John Bartlik from NYU Medical Center.

HEARING

MR. BARTLIK: Good morning. I'm grateful to have this opportunity to speak with you today. My name is John Bartlik. I'm from NYU Langone Medical Center located here in Manhattan on First Avenue between 33rd and -- I mean, 30th and 33rd Streets. We're a large health care facility as well as biomedical research and medical school.

I'm here to talk to you about how NYSERDA impacted our business, our business decisions, why we think NYSERDA works as far as local businesses are concerned and also the city goals as well as State goals and humbly suggest some expansions of the programs that we feel would be very helpful.

NYSERDA is what I believe a great organization. It helped us understand better how to improve our energy efficiency. Their programs have helped us dramatically in terms of making good business decisions that have a great impact on energy efficiency.

HEARING

Our successes so far -- well, we received about over $3 million from NYSERDA and the benefit is pretty clear. Since our baseline year 2005, we reduced our energy consumption by 14 percent, greenhouse gases down by 15 percent.

We are expanding this. It's something we recognize that this is some -- energy is really a controllable cost, and we are really recognizing that we need to be an environmental steward and be responsible with our energy. It's just very difficult sometimes to make the hard decisions to really invest where we need to to have those energy impacts.

The reason -- you know, it's funny that we're here talking today because on the way in we were implementing some recommendations and programs NYSERDA helped us implement. We are fuel switching and running steam chillers to avoid electrical peaks. We are shedding loads and trying to really

shave our peaks and, you know, take the congestion off the grid.

I would really be concerned where we would be if NYSERDA programs weren't really in place all these years helping us reduce our kilowatts and energy use. I'm not sure if our grid could withstand a day like today.

NYSERDA also just helps guide us and educate us. There are groups on the ground everywhere. I meet NYSERDA people at all of our professional organization meetings and they're getting the word out on a regular basis. NYSERDA really has been a great organization.

I would -- I almost -- I look at it as if it's not a typical government agency, it's -- it really acts very efficiently, very effectively and people are very responsive. The programs really seem to align with our business goals our local and State government energy and environmental goals. I have

to applaud them and I believe they're, you know -- it's just a fabulous organization.

As far as suggestions, I do have -- I have 20 years experience in HVAC facilities management, control systems. And one of the recurring themes that I've seen is -- well, excuse me. Let me back up just for a second. I think cogen is really part of our future. Cogen is something that in an urban setting could be very efficient, could be in line with our city goals for plan NYC Carbon Reductions, can relieve the grid and can just reduce our overall energy consumption.

I think that right now the economics of cogen are very difficult. It takes a great deal of investment to put in a cogen plant, and so I would ask that NYSERDA spend a little more time researching that and researching how we can use that heat most wisely and the electrical generation most wisely.

Also, from my experience I've noticed that we can really help our efficiency if we put some more regulation and training and certification on HVAC and building control people. They are key to efficiency. They install the systems and there's really no regulation or training for them that we can keep control of. If we -- we insist that boiler operators and chiller operators have certification, but we don't with HVAC people or controls people. I think it would go a great, great distance if we did something like that.

Also, our people -- our companies do not have any extra funding for dedicated energy professionals. A dedicated energy professional in large facilities is essential, and since I am a dedicated energy professional and we did have those reductions in '15 by 15 percent in a very short amount of time, I -- I think that that's something that

should be looked at as far as helping large companies with that cost or somehow promoting it. I thank you for your time. I want to thank NYSERDA for all the great work you've done. Thank you.

MR. CONGDON: Thank you very much.

MR. GRANNIS: Thank you. I think NYSERDA doesn't get the attention it needs to get for the work that they do. They really do have the ability to provide and help in many, many sectors that are directly related to the work of the citing of the master plan, the Planning Board and Tom's work and ongoing efforts to reduce greenhouse gases and be more energy efficient. So thank you.

MR. CONGDON: Thank you. Our next speaker is Joseph Colella from New York Presbyterian Hospital.

MR. COLELLA: Good morning. I am pleased to appear today and am grateful

for the opportunity to recount for you our ten-plus-year history with energy savings and with NYSERDA. But first let me tell you a little about New York Presbyterian. New York Presbyterian is the merged hospitals that we all knew here in New York as New York Hospital and Columbia Presbyterian Medical Center that merged about ten years ago, and we are the university hospitals for Columbia and Cornell.

We encompass five hospitals: the Millstein Hospital, the MS Children's, the Allen Pavillion, what was New York Hospital, and our Westchester division. In these divisions we employ approximately 16,000 people, and one of five health care operations or procedures are performed in one of our facilities in the New York area.

We at New York Presbyterian have participated in almost every type of project the program offered. We've done technical assistance, energy audits,

peak load reduction and retro commissioning, and most recently we have just commissioned our new central heat and power plant, CHP, a cogen plant here in Manhattan, and the study, the demonstration, and even a special short circuit club that allowed CHP in a very congested network area, that had very small tolerance for short circuit contribution, was also funded by NYSERDA, and that allowed us to succeed and get this project moving.

The NYSERDA funds are particularly important in the evaluation and the study of projects. At the beginning of these projects the study, the payback, the technical ability to do these are not readily available until you actually fund these particular functions. But once that's done, then it's more easy to convince administration and upper management to fund these, and great sums are required at times to fund these projects and get

the energy efficiency and carbon reduction that can be achieved.

Over the last five years at New York Presbyterian, we've experienced over 3 and a half million dollars in grants and awards from NYSERDA and we've grateful for that. Without these funds we would not have been able to become a leader in energy awareness and cost reduction.

This success story is a major part of the reason why New York Presbyterian was named Energy Star partner of the year for four consecutive years. If any area that I would ask the Planning Board to consider, here in New York the photovoltaic programs, while we do have them in the menu and the list of what's available, the reimbursement levels are not quite what some of the other states in the country have done, and there's some room for improvement in that.

Again, I thank you for the

opportunity to speak today and applaud the State and NYSERDA's effort in making our State a leader in the energy field. Thank you.

MR. CONGDON: Thank you, Joseph. Our next speaker is Arnold Frogel from the Sierra Club.

MR. FROGEL: Good afternoon. Or is it morning? I would just like to say that on -- there's very little attention given here to the natural gas exploitation and Marcellus Shale in your printed material. I hope that you're aware of the profound risk that is presented by the use of this resource, which involves the use of many chemicals and many of them toxic.

I have a list of 48 toxic chemicals that are -- that have been used in this process that have come from the DEC and that have been -- that have been gathered from the material data safety sheets. I believe that's the federal government. Accidents will

happen. They do happen. They will happen.

These chemicals in fracturing fluids that are proposed to be used for the extraction of natural gas migrate in every direction in the subterranean environment, and they migrate great distances. They've already had terrible effects on people's health in other areas, and we cannot afford to turn a blind eye and suspend our disbelief of the blandishments, the dispersions of the companies that have been pushing for this natural gas development, and with the DEC having only 17 people in their minerals division, 17 people to handle upwards of 25,000 different wells that are to be explored in the State of New York, there's a no-brainer here and it has to be faced. It can't be swept aside.

You can't leave it to people who have only the bottom-line profits in mind and who have all the defenses of

judicial -- in the judicial process to overwhelm the individual citizens. Thank you.

MR. CONGDON: Thank you very much. Our next speaker is Frank Martino from Columbia University.

MR. MARTINO: Hello. Good morning. Frank Martino, assistant vice president of plant engineering and utilities at Columbia University. I'm also a board member of the New York Energy Consumers Council. Some of my colleagues are here today. I have about 17 years of facilities and engineering and energy initiatives experience here in New York City.

So I'm here on behalf of Columbia to express a strong support for NYSERDA and their involvement as the primary agency overseeing the State Energy Plan. Columbia owns, operates, and maintains over 13 million square feet of mixed-use space with a central energy plant at our Morningside Campus.

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We are currently in development of an expansion of -- a real estate expansion in the Harlem area. We will build another central energy plant there with lots of innovative energy features to serve the academic operations of Columbia and its academic research.

As an original member of the mayor's plaNYC, we committed to reducing carbon emission by 30 percent by 2017, and we're very serious about that commitment. The overwhelming bulk of that 30 percent is going to be due to energy usage well over 90 percent.

Historically the university has benefited from millions of dollars in NYSERDA funding over the years through all of their many programs that they've offered. Without that funding, many of those projects that we've implemented that have long-term energy savings would not have been completed.

Currently we're working on a new central energy plant, as I mentioned

before, a chilled water distribution expansion to more effectively and efficiently generate air-conditioning for the university in support of academic operations. We have some geothermal wells that we've drilled for central HVAC control. We're doing lighter retrofits, doing lean buildings and lean construction.

All of these are being constructed and developed with the help of NYSERDA technical assistance. They either have NYSERDA funding appropriated or in the process of being appropriated, and it is a tremendous and -- and absolutely imperative help that NYSERDA gives us for these kinds of projects.

Our future plans include central thermal storage, solid-state lighting, and combined heat and power cogeneration. All of this is contributing to the New York State Energy Plan and its primary goals of energy security, energy efficiency,

reduced carbon footprint.

Along those lines, we would like to strongly express our support of cogeneration and CHP, particularly in New York City as a hallmark of the State Energy Plan. And NYSERDA, with all of their technical assistance and experience in developing these plans, is the perfect partner to help facilities like Columbia University and some of my colleagues who have already spoken here today to help us along. Thank you very much.

MR. CONGDON: Thank you very much. Our next speaker is Gabrial Carter from Triplepoint Energy.

MR. CARTER: We will be submitting written comments on line.

MR. CONGDON: Okay, we'll get your comments online. The next speaker is Martha Duggan from Solar Alliance. Martha?

MS. DUGGAN: Thank you. I'm Martha Duggan, vice president of the and

regulatory affairs for United Solar Evoniks. We're the leading provider of American-made, thin-film, flexible solar products for the building integrated and commercial rooftop markets.

I am here today to offer comments on behalf of the Solar Alliance, and as I think you know, the Solar Alliance is a trade group consisting of 30 companies that manufacture, install, finance, and manage solar systems throughout the United States. The mission of the Solar Alliance is to work with State policy makers and thought leaders such as yourselves to develop cost effective solar policies and programs.

I really appreciate the opportunity to make brief comments today on the Draft State Energy Plan. The authors and the stakeholders are to be applauded for the hard work that has produced an important and thoughtful document. It's a great starting point.

I would like to offer a few

comments on the report. The Solar Alliance strongly supports the draft report recommendation that the current renewable portfolio standard be increased to reflect Governor Paterson's commitment to 30 percent renewable energy by 2015.

An integral part of reaching that goal should be to specify a solar goal as part of a larger renewable portfolio standard. Our recommendation is that a 700 megawatt solar goal as part of the 30 percent is an achievable and significant goal. We also support the conclusion in the report that more reliance on in-State energy resources will be a benefit to the State of New York.

I'd like to underscore the role that distributed solar projects can play in that record. Distributed solar can be deployed quickly and make immediate contributions to reducing peak load demand on utilities as well as reduction

of the use of fossil fuels.

Those benefits actually lead to our next point, which is the recognition that the perceived price disparity between renewable and traditional fuel resources doesn't consider all of the costs to society of continued reliance on fossil fuel, and the report does a great job of recognizing that.

In the case of distributed solar, the cost that can be avoided include costs for additional transmission facilities. This attribute of distributed solar also addresses another of the Draft Report findings concerning the fact that the location of many renewable projects are far from load centers in the State. Deploying more renewable PV projects would, of course, address that issue.

We do, however, take issue with the report's conclusion concerning, quote, the extraordinary cost of increasing renewable energy in New York.

We would urge you to expand and revise that conclusion by taking into account the continuing decrease in solar prices in particular.

The Draft Report reflects an underlying assumption of $8 per watt of solar installed. This assumption excludes three important factors: The fact that much of the existing solar in New York on which this assumption is based is residential in small systems that are typically higher in price.

Second, there is an ongoing decline in solar panel costs estimated by some to reach as low as $2 per watt by the end of this year.

Finally, balance of system costs have also shown significant declines as project developers establish efficient distribution channels and construction practices in response to growing market demand.

Not only is the starting point in the State Energy Plan Draft analysis too

high, it really fails to take account of the decline in cost over time as markets achieve scale, and we've seen this in other more developed solar markets globally as well as in the United States.

The Solar Alliance appreciates the Draft Report's recognition of the need for further reform to New York's net metering rules. Clear and fair net metering rules are a cornerstone to any solar market. The Solar Alliance stands prepared to assist in revising the rules to remove ambiguity and to support further solar development in New York.

Finally, we support the Draft Report recommendation that the Long Island Power Authority and the New York Power Authority continue to play leadership roles in New York's move to more renewable energy. Specifically the procurement programs that LIPA and NYPA should strive to develop regular schedules for procurements and awards

because this would send a strong signal to the renewable community that there is indeed an enduring and long-term program through those procurements.

Thank you very much for the opportunity to comment. We look forward to working with you.

MR. CONGDON: Thank you. I have a follow-up. Did you say that there are studies that estimate that the solar installed costs would be $2 a watt by the end of the year?

MS. DUGGAN: There have been estimates that solar panels will reach that price point by the end of this year, and I'd be happy to provide them to you.

MR. CONGDON: That would be terrific if you can send that in.

MS. DUGGAN: I will do that.

FEMALE VOICE: Is that the installed price or the price of the panel, the equipment cost?

MR. CONGDON: That's the

equipment cost. I see. Not installed. Thank you for the clarification.

The next speaker is David Brooks from Just Bulbs The Light Bulb Store.

MR. BROOKS: Hi. I'm David Brooks from Just Bulbs The Light Bulb Store here in Manhattan. I've been doing light bulbs since 1980 and I love light bulbs. Not the ones that make you look green, not the ones that start dim and warm up later, not the ones that are not as bright as the bulbs that you start to put in to replace them, not the ones you find in every supermarket and hardware store, but wonderful light bulbs that enhance your mood, make it easier to see, improve your decor and save energy at the same time. I'm talking about energy efficient light bulbs, but not Energy Star light bulbs.

Energy Star light bulbs are not up to the job they're required to do. Sure they handle the basics, but it does nothing about telling people not to turn

their lights off when they leave the room. New energy efficient light bulbs use more electricity in turning the lights on than in keeping them on. So if you go in and out of a room and turn lights off, as in your bathroom, you'll use more electricity than if you'd never turned them off in the first place.

It does nothing to promote the 35 different colors of whites and color combinations to optimize the look of a room. If you look in this room here, you have four different colors of white in the same place. Doesn't make sense, but that's what they're doing. That's what needs to be looked at.

Do you know that you can create a look of a smoke-filled room with 2400 K light bulbs? Do you know that when you go to the supermarkets and you go down the aisles, if you put light bulbs -- certain light bulbs in the meat aisle, the red meat looks redder? If you put different light bulbs in the produce

aisle, the green stuff looks greener as well. It sells more product that way.

Did you know that if you go into a kindergarten room and you put full-spectrum light bulbs in that kindergarten room, the kids are more attentive under full-spectrum lights? If you do the same thing in an office of a grumpy person, he becomes more pleasant.

Do you know a home decor looks best if you use a bulb called Florida Sunshine Color instead of plain old soft white? If you use indirect lighting, it's always more pleasant than direct lighting. But do you know that none of those bulbs are Energy Star?

Old ladies like soft pink light bulbs because it makes their skin look better. Diamond dealers like daylight bulbs to make the diamonds sparkle. You have to have the right color for the right application to do the job.

Recently we did a project in

Gracie Mansion to make it more energy efficient, but the challenge there was to make it historically accurate at the same time. They wanted to keep the look of the old house while still being useful. And we did very well. We made it energy efficient, but we didn't make it Energy Star. Why? Because niche products don't get certified. It's too much trouble to get the niche products certified.

Then there's the question of light bulb shapes. If you put a standard spiral shape that you find everywhere in a recessed fixture such as these in the ceiling, you're wasting three-quarters of the light that's actually coming out of that light bulb because it's getting used up inside of the fixture.

If you use the right shaped light bulb in a right application you'd use one-quarter of the amount of light than you otherwise would. That's a huge

savings. If you put globe light bulbs over -- for bathrooms typically, it forces light out in all directions. Again, you need fewer light bulbs and less brightness to get what you need. Torpedoes work best in chandeliers. Various decorative bulbs work best in antique lamps.

What I'd like to see you folks doing is finding a way to streamline the process for Energy Star certification of niche products. These niche products are a major factor in the markets, but they simply don't qualify under Energy Star at all. That's what I have to say today.

MR. CONGDON: Thank you. Our next speaker is Susan Leifer from the New York State Sierra Club.

MS. LEIFER: I have to grow a little, I guess. My name is Susan Leifer. I was born in New York City, and I've spent my entire 72 years in New York State and maybe a few more. I'm

part -- I've been part of many environmental groups and am particularly interested in clean water and I'm particularly interested in environmental issues.

So my first question is: Is there a critical need for more energy in New York? And if so, is hydrofracturing in the Marcellus Shale for natural gas the way to get it? In a Conservation Report Buck Denton on the blog said natural gas, like all fossil fuels, comes with a huge health and environmental footprint from drilling to burning. The natural gas industry is responsible for 18.6 of greenhouse gas emissions in the United States. Praising natural gas for being less cancerous and less polluting than coal should only underscore how dirty a fuel coal is and not promote the false impression that natural gas is clean.

In New York State we use one-half of the national average energy per

person. Con Ed doesn't need more energy. It has closed or not started several plants. We can conserve more energy. Conservation, smart grids, smart metering are all the tools to provide us with enough energy.

Rather than add new sources of energy, we could provide help to insulate all our public buildings, schools, libraries, places of work, religious houses, and make it very affordable to insulate our own homes.

Our DEC is understaffed, having, somebody said, 17, I heard 19, to monitor and protect our whole State. It's an impossible task. A recent four-year request from the DEC yielded the highly hazardous products used in fracking fluid in the Yates, Schulyer, Steuben, Green, and Cortland counties.

The conclusion that can be reached is that there is no State water works that is equipped or able to reclaim fracturing fluid and make it

safe enough to put it in our streams and in our waterways.

Subsidies. Federal money, tax expenditures largely go to process fuels. About 13.7 billion in 2007. According to the GOA, the government accountable tables, natural gas reaches the biggest chunk of federal subsidies.

State and local subsidies. The Industrial Development Agency offers conduit financing for the issuance of tax exempt industrial revenue bonds and tax exempt civic facility bonds, sale and leaseback transactions, products expansion, finances without issuance of bonds.

In general the IDA can insist the projects with the purchases of land, existing facilities, new machinery, and equipment, the construction of any facilities, renovation. IDA benefits can combine with incentives provided by other sources.

Bond refinancings. IDA can act

as conduit for tax exempt industrial revenue bonds. Tax abatement is the section of the local general municipal law that provides that IDAs are not required to pay any tax upon any of the property acquired by it under its jurisdiction or control or supervision or upon its activity.

Consequently, there are three benefits associated with IDA transactions: Real property tax abatements, sales-and-use tax exemptions mortgage recording tax taxes. More subsidies.

New York State Empire Zone was created to stimulate economic growth throughout the State. Three new and potentially lucrative credits were added and more empire zones were created. They offer a tax exempt revenue bond and taxable revenue bonds. By the time we as taxpayers pay for all these subsidies and all the exemptions, hydrofracturing will get an essentially free ride. The

State will not realize any additional revenue and have an increasingly health and environmental burden.

In areas where hydrofracturing is taking place, families and neighbors are experiencing everything from miscarriage, rare cancers, diseases of the central nervous system, seizures liver disease. This came from John Fenton of Pavillion Area Concerned Citizens, a citizens group formed to address oil and gas contamination.

Wind power. Wind project owners receive tax credits only for the electricity they produce. Many subsidies for the new clean energy technologies are temporary, while many for older polluting energy technologies are permanent.

Wind energy's primary incentive, the PTC has been allowed to expire multiple times since creation in 1992. The long-term benefits of investing in wind energy will save Americans billions

of dollars through reduced health pollution and waste cleanup.

Wind power enhances natural energy independence for both rural and economic development and contributes to energy price stability and helps address climate change.

I'm almost finished. Hydrofracturing uses two to five million gallons of water per well, a thousand gallons per minute. We now have an abundant supply of clean water in New York State and we need to keep it that way. The contamination from gas drilling would make new swathes of land and water unable to be used as farm land. These will become more essential as the west and central U.S. are increasingly experiencing the scarcity of water. In fact, world water scarcity looms.

We cannot get back the land and the water we squander under the basis of natural gas. Please include the total

ramifications for any energy ecology you use for New York State. I totally support Governor Paterson's call to reduce our carbon footprint by 2015. Thank you for this opportunity to express myself.

MR. CONGDON: Thank you very much. Our next speaker is Stuart Nachmias from Con Edison.

MR. NACHMIAS: Good afternoon. My name is Stuart Nachmias. I'm vice president of energy policy and regulatory affairs for Con Edison. Thank you for the opportunity to provide these remarks on the Draft State Energy Plan on behalf of Con Edison.

Our company is supportive of the development of the Plan as a means to map out specific actions to meet the future energy needs for the people of New York and for all of our customers in New York City, Westchester, Orange, and Rockland Counties.

The Draft Plan contains many

recommendations and we commend the team on providing thorough assessments in a variety of areas. We suggest that the final Plan provide a more detailed road map of actions required to implement the Plan's recommendations. Specific recommendations will guide into actions. We also recommend that a process for public comment on specific recommendations be included prior to adoption of the final Plan.

New York City is probably the most energy efficient area in the United States due largely to our public transportation network and concentration of multi-family buildings. The State should encourage economic development in New York City, not just for the direct economic benefits, but also the growth that will enhance the State's energy efficiency.

New York's energy needs are changing resulting in requirements to modernize the electric transmission and

distribution systems, to encourage customers to use energy more wisely, to accommodate new uses for energy like electric vehicles, to address climate change by reducing greenhouse gas emissions, and to encourage clean renewable sources of energy. The challenges of the future are substantial. A detailed plan to meet these challenges is an imperative.

I'll make four main points today. I note that Con Edison plans to provide written comments in October as well. First point: Support for a modern reliable grid. Con Edison strongly supports the plan's focus on energy reliability, a threshold requirement.

A robust reliable and modern grid is essential to advance the State's economic goals, recognize the importance of New York City as an engine for growth in the State. Maintaining a modern grid will require substantial capital investment and the Plan acknowledges

this.

The grid is in the early years of a technological revolution that will provide new functionalities. Con Edison supports the Smart Grid as a cost effective tool to mitigate long-term infrastructure needs. Our recent announcement of the Smart Grid demonstration program in Long Island City, Queens, and the proposal to further advance our Smart Grid with federal stimulus dollars lays out our future directions to introduce new technology to the grid.

Grid intra-operability with local renewable energy sources will be one important focus of Smart Grid. Deploying Smart Grid technology across the distribution system should be the first priority. A second priority is deploying smart meters at the customer level starting with the customers that can provide system benefits.

The State should build on current

plans for Smart Grid investment by developing, in conjunction with the State's utilities, a detailed Smart Grid implementation road map. The Plan must be coupled with an overall strategy to encourage investors to choose New York utilities over other investment opportunities.

Second point: A plan for efficiency and innovation. Competitive wholesale markets have provided incentives for efficiency and innovation. The State should plan to use competitive solutions where practical and an effort to improve the market so they can produce competitive results should be continued. The Plan should provide for further development of the electric capacity and energy markets to accommodate and reflect demand response resources.

With respect to wholesale markets, the Plan should advocate the use of demand response resources for

setting electric generation past the prices as part of the New York ISO triennial process to set capacity prices.

The Draft Plan advocates keeping energy costs competitive and affordable for customers, and Con Edison supports this objective. Con Edison supports the Plan's emphasis on energy efficiency and the likely need for more natural gas.

Clean energy technology will be important to the State's future economic health, and the State Energy Plan should encourage investments and renewables throughout the State, keeping an eye on the cost of those investments.

Renewables will be critical with federal climate change legislation being considered. New York procures 21 percent of its energy from existing renewable resources and additional renewable energy is a good investment for the future.

The Plan should adopt achievable

cost effective clean energy goals and should disclose the cost to achieve goals contained in the document, such as procuring 30 percent of our energy from renewals by 2015 or reducing carbon emissions by 80 percent in 2050 so we can understand the cost to implement the plan.

The State utility companies can and should play a greater role in developing renewable resource programs. With the framework for utility participation, including cost recovery for cost effective programs, the ability to leverage RGGI and other policy funds and a specific reconsideration of any generation investment limitations, the State will position itself for leadership in this emerging and vital effort.

The State shall allow flexibility for the disbursement of RPS funds when an area of the State is paying more into the program than is spent in that same

area.

My third point is a plan to address climate change. The Draft State Energy Plan advances the need to address climate change by drastically reducing the State's carbon emissions. The Plan's opposition to relicensing Indian Point to be replaced with a carbon-emitting natural gas plant should be reconsidered. Nuclear power provides carbon emission benefits and also provides important reliability benefits and economical energy.

Just a final word, a fourth point, on cost effectiveness. Con Edison is glad to see cost effectiveness as a theme throughout the State Energy Plan. It needs to be an all-in concept when it comes to driving the State's energy policy. For example, when considering renewables, the cornerstone for reducing carbon in an electric system, the cost of long-hall transmission may make local renewables

like offshore wind located close to New York City a better solution for customers than other options. The final Plan should propose specific considerations for cost effective decision-making that will benefit New Yorkers.

In closing, we look forward to the detailed implementation plan so that Con Edison can consider and meet the State's objectives in providing New Yorkers with a strong energy infrastructure that is safe, reliable, clean, and affordable. Thank you.

MR. CONGDON: Thank you, Stuart. Our next speaker is Marian Rose. Marian, nice to see you.

MS. ROSE: Good morning. My name is Marian Rose. I'm with the group Water Safety and Water Coalition, which is a not-for-profit coalition with over 50 groups, community, environmental, housing, and religious. The objective is to maintain safe, clean, and

affordable drinking water for New York City and New York State residents.

Now, the Draft New York State Energy Plan would, quote, encourage development of the Marcellus Shale natural gas formation with environmental safeguards that are protective of water supplies and natural resources. New York City's Delaware Watershed, that supplies superb quality, still-unfiltered drinking water for up to 60 percent of the New York City metropolitan area's needs, lies within the Marcellus Shale.

The Water Safety and Water Coalition considers the Energy Plan's program to extract natural gas within the New York City watershed to be a dire threat, indeed an unacceptable threat, to the integrity of the drinking water supply for over 9 million New York State residents.

Furthermore we are adamantly opposed to hydrofracturing, or fracking,

which is the most likely method to be used for gas extraction. New York City has an unparalleled source of drinking water that lies within a 2,000 square mile watershed. 90 percent of New York City and metropolitan needs are supplied by the West of Hudson Catskill/Delaware watershed. The remaining 10 percent are supplied by the Croton.

The Catskill/Delaware Watershed, which is far less developed than the Croton, is over 70 percent forested. Thanks to the abundance of forests, the water from this watershed is of such high quality that it only requires minimal treatment and probably saving of over $20 billion should a water treatment have to be built because of water contamination.

But water contamination is exactly what is likely to happen if fracking is allowed in the Delaware Watershed. Fracking includes clearing access roads through the forest and

clearing a well site that can be anywhere from three acres to 30 acres, extracting from one to three million gallons of water from the aquifer. This is likely to deplete nearby streams that will lose their base load during the dry months or trucking the water in from elsewhere.

It involves mixing the water with sand and chemicals, whose mix is a trade secret, it involves drilling wells several thousand feet deep into the aquifer, and it involves drilling at right angles to this well through the shale layer for another several thousand feet, forcing the water down into the well under such power that it will break up the shale containing gas and release gas into the well.

At least 40 percent of the chemically contaminated water can remain below ground for up to four years and seep into the aquifer before gradually being absorbed and diluted. The

remaining contaminated water is either trucked off to be treated at a sewage treatment plant, that one hopes is able to treat the chemicals, or it is stored above ground in pools at the site.

In the latter case, run-off from storm water and infiltration in the ground water poses a threat. These well sites leave gaping holes in the forest canopy and the truck roads fragment the forest itself. Both have the effect of weakening the forest and diminishing its unique ability to provide clean, fresh water.

The potential for contamination of local wells, aquifers, streams, and reservoirs is very real. Already there have been numerous reports of local wells being contaminated, although the gas drillers claim this is but a small percentage. However, it is a 100 percent loss for the homeowner and the loss to the 9 million New York City residents who depend on this water would

be overwhelming.

Because fracking can cause irretrievable damage to New York City's main source of drinking water, the permitting agencies and authorities must bear the full burden of proof that this method of extraction will not degrade the water in any way.

Only the most stringent regulations being strictly enforced will there be any realistic hope of protecting our drinking water. Unfortunately, there seems to be little desire for strict enforcement by the Governor or the New York State agencies.

The Governor's recent Executive Order No. 25, under the pretext of efficiency and saving money, in reality merely eases the permitting process for its sadly depleted DEC staff and shortens the applicant's period of waiting for a permit. It does nothing to protect our water.

With New York State facing

difficult economic times, the Governor would no doubt be pleased for New York State to receive $1 billion in anticipated revenues from gas drilling. Difficult as it may be, we urge the Governor to take the long-term view and not sacrifice New York State's unique resource, its drinking water, for short-term gains. We urge that gas drilling in the New York City Watershed be excluded from the 2009 New York State Energy Plan. Thank you for this opportunity to comment.

MR. CONGDON: Thank you, Marian. Our next Speaker is James Hegarty from the Laborers' Union.

MR. HEGARTY: Good afternoon. I want to thank the panel for letting me speak here today. My name is James Hegarty and I am a field representative for the Mason Tenders' District Council Political Action Committee. The Mason Tenders' District Council Political Action Committee is comprised of more

than 15,000 members in six local unions of the Eastern Region of the Laborers' International Union of New York. The Laborers' International Union represents some 40,000 men and woman in New York State working as construction laborers, mason tenders, plasterer's helpers, office and professional personnel, demolition workers, recycling plant employees, sand hogs, pavers, high school teachers, and asbestos and hazardous material abatement laborers.

The New York State Energy Plan has a fatal flaw as its very premise. The problem with such an error at its basic level is that the entire plan then becomes faulty. As we know in the construction industry, if you build a structure with a flawed foundation, all that gets built atop will be flawed as well. That fatal flaw is the misguided premise that nuclear energy is inherently dangerous.

In a day and age where every

conceivable entity, from the White House to the State House, to numerous city halls throughout the State are searching for ways to achieve energy independence, to dismiss a technology that over decades of use and refinement has proven itself to be a safe alternative to foreign oil is foolhardy at best.

As of 2008, there were 59 nuclear power plants operating safely throughout France, producing an astounding 87.5 percent of that country's electricity. Public opinion polls show that 70 percent of the population has a positive opinion of nuclear energy.

But here in America, we still cower in fear thinking that such movies as "The China Syndrome," three-decades-old work of fiction represents the nuclear industry of today. That is certainly not the case, and those myths need to be put to bed for very good reasons.

These irrational fears have a

very real impact on the lives of countless New Yorkers. The closing of Indian Point would affect numerous businesses that rely on clean, affordable, safe electricity generated there. The loss of that energy supply has ramifications affecting the State's tax base as well as the company's revenues, and thus their employees.

Of course, as a laborer representative, it is the workers that are my main concern. In these hard economic times, when the Federal Government is pumping billions of dollars into stimulus programs in order to put people back to work, why should New York State undertake an action that will result in even greater unemployment? Particularly when that action is based on a flawed premise.

With up to 40 percent of the Hudson -- lower Hudson Valley's coming from Indian Point, closing that plant would result in the loss of jobs for

thousands of New Yorkers, further devastating the already faulting economy of our State, while simultaneously sounding the final death knell for any manufacturing still being done between Albany and the New York City line.

I urge the leadership of our State to remember that while the squeaky wheel often gets the most grease, it does not always need it. Do not let a small but passionate minority control the debate on this vital issue. If New York is ever going to again regain its status as the Empire State, the economic engine of the United States, and indeed the world, logic must overpower rhetoric and in fact must triumph.

New York needs clean, reliable, safe energy. New York needs industry. New York needs jobs. The continuing operation of Indian Point helps to achieve all of these goals for the good of all New Yorkers. Please keep Indian Point open and operating. Thank you.

HEARING

MR. CONGDON: Thank you, James. Our next speaker is Ruben Brown from E Cubed.

MR. BROWN: Can this pick me up at this angle?

MR. CONGDON: Yes.

MR. BROWN: My name is Ruben Brown from E Cubed Company, LLC, representing an ad hoc coalition that's been in existence for 20 years called The Joint Supporters. This includes the National Association of Energy Service Companies and its 60-plus members who are performance contractors doing much of the work across the State in energy efficiency programs, distributed generation activities, and demand response programs.

It includes an upstate manufacturer of the largest boiler maker in New York, ECR International, which is trying to innovate with on-site residential micro combined heat and power systems at the 1.2 kilowatt level.

I'll talk about that further. It includes other manufacturers of small generating systems, capstone micro turbines, a variety of demand response providers, NDG providers, including some Energy Star winners in the facilities built in New York City in the past few years and the like.

The coalition has participated in all major State energy planning activities in the last 20 years, ranging from the challenge to import contracts from Canada 20 years ago, which led the way for an evaluation on in-State conservation and in-State generation, was a more effective resource than building dams in Northern Quebec. I'm not here to argue that issue today. I think some of us lived with that one a long time ago.

One of the things in our review of the executive summary of the plan and various components of the plan that sticks out very loudly is the wording

that you use versus the wording that we would use. We would focus strategy No. 1 on reducing waste energy. You produce, deliver, and use energy more efficiently, yes, we agree with all that.

But the waste energy that is present in the New York economy includes energy from the standpoint of fuel entering a power plant, losing two-thirds of its value in the power plant, and then losing another 8 to 10 percent on its way to the end use. So the concept of producing power on site already saves 65 to 70 percent of the BTU input to the New York economy.

So the concept of using natural gas or propane at a site -- and we've heard numerous speakers raise the combined heat and power alternative -- is a concept that is underplayed in this plan. And one of the statements that was made privately by a State official recently was well, we were looking

forward, we weren't looking back; you know, combined heat and power is already here with us.

In fact there's still much innovation to occur with respect to the use of combined heat and power, and I'm going to use the example at the residential level to illustrate the purpose. There are 50,000 kilowatts of micro combined heat and power in existence in Japan. At the present time there are 50,000 kilowatts of installations in Europe at the present time.

The European Union in February of 2004 established an efficiency standard -- total efficiency standard for under 50 kilowatt micro combined heat and power installations that's using the same fuel to produce both heat and power rather than two fuel streams like the one at the utility plant and the one over at your house to heat it. They set a total efficiency standard of

80 percent. Accompanied countries around Europe are gradually adopting that.

And I'm going to pick up on the point because earlier this year the State of Maine adopted 80 percent as the total efficiency standard for micro combined heat and power and the legislature of New York State has adopted it as the standard for New York State with respect to the net metering legislation that is pending on the Governor's desk for signature at the present time, which we steadfastly urge you to sign.

The State of Maine went further. The legislators said simply we're revising the net metering laws for renewables, we're going to revise the net metering laws for micro CHP to allow any fuel and any technology that arrives at the 80 percent level, and we're going to raise the level on the renewables to 660 kilowatts to reach big windmills.

And low and behold they did the same thing for micro CHP. So you've got to have an efficiency standard up to 30 kilowatts of 80 percent and from 31 kilowatts to 660 you got a 65 percent efficiency standard.

Having stated that micro CHP and other things like that are appropriate for action -- and I'll finish up in just a couple of moments -- one of the innovations that has reflected in the Plan is a strong attempt to coordinate everything under the sun. And unfortunately, in an ecological system, diversity brings stability. And as you've moved to coordinate and concentrate, you're cutting off a lot of innovation and things at the margin.

One of the places this has squirted out into the public life recently is Brookhaven. And in legislation that is also on the Governor's desk on the use of garbage district funds to pay for energy

efficiency in homes.

One of the reasons I feel so strongly that towns across the State ought to be allowed to do this is that it gets us out from underneath Garry Brown's jurisdiction at the Public Service Commission -- because the town boards make their own decisions about energy efficiency -- so Garry doesn't have to worry about all that stuff, NYSERDA doesn't have to worry about all of that stuff, and importantly, it provides a whole series of alternatives for people to get out and spend maybe up to $12,000 at their house. And the towns are using their ARRA money to match this.

So we think that there's a tremendous opportunity to loosen up the one-in-four family residential marketplace for energy efficiency. And you've got over three million homes in the State that use natural gas to heat with.

HEARING

So back to micro CHP and the end of my statements, we can save 46 percent of the carbon dioxide emissions of the State by letting people generate on their site. We can save 30 percent of the fuel that is consumed in the State by allowing that to happen. End of comment. We'll provide written remarks on behalf of our represented constituencies.

MR. CONGDON: Thank you, Ruben. Our next speaker is Matt Wallach from the Citizens Campaign for the Environment. Matt?

MR. WALLACH: Good afternoon. Thank you for the opportunity to provide comments today. My name is Matt Wallach. I'm the Hudson Valley program coordinator for Citizens Campaign for the Environment, CCE. CCE is an 80,000 member nonprofit, nonpartisan advocacy organization working to protect the public health and natural environments in New York State.

HEARING

CCE works to build widespread understanding and advocacy for policies and actions designed to manage and protect our natural resources and public health. CCE works actively at the local, State, and federal level to advance policies that reduce greenhouse gas emissions and promote clean renewable energy solutions.

CCE applauds the Energy Planning Board for moving forward with the New York State Energy Plan process, releasing the draft report, and welcoming public comments and feedback. CHP supports New York State formulating an Energy Plan for the region. An agreed-upon plan for energy development in the State will benefit the environment, public health, and our climate by meeting our energy needs in the most efficient, sustainable, and cleanest manner while providing regulatory certainty for energy companies in New York State.

HEARING

CCE thanks you for the opportunity to provide comments and touch on one important priority -- some important priority principles today. CCE will also submit more extensive and detailed written comments during the comment period.

CCE and our 80,000 members support an Energy Plan that stabilizes energy costs, creates new jobs, and increases our energy independence by investing in energy efficiency and renewable energy, not new coal or expensive nuclear power.

Thousands of our members signed petitions and more than 5,000 of our members wrote individual letters of support to these -- on these principles during the comment period on the scope plan. CCE is pleased the Draft Plan puts such a strong emphasis on energy efficiency and renewable energy developments. The best kilowatt of energy is the kilowatt that we never

use.

Energy efficiency and conservation are the first and most important strategies to reducing costs and saving ratepayers money, reducing pollution and benefiting the environment, and benefiting national security. CCE strongly supports the Governor's ‘15 by 15’ plan and the many recommendations in the Draft Plan for efficiency beyond 2015.

While energy efficiency is critical, increased renewable energy production is also necessary to meeting demand, displacing dirty fossil fuels and nuclear energy, while benefiting the environment.

CCE supports the Governor's ‘45 by 15’ goal that requires 45 percent of New York's energy mix is obtained by renewable energy and energy efficiency by the year 2015, which is supported in the Draft Plan.

New York State has great

renewable energy potential that must be realized to fight climate change, increase energy independence, and benefit local economies and create green jobs.

The Draft Plan indicates that it's technically and practically feasible to generate more than 75 percent of New York's electricity from hydro, solar, wind, and body mass by the year 2018. In particular, New York State is a wind-rich State with tremendous potential for -- to generate clean renewable wind energy.

CCE supports policies and actions that will help wind reach its potential both on land and offshore, in the ocean and Great Lakes. While all energy sources have an impact on our environment, wind produces no harmful air or water pollution, and potential adverse impacts can largely be mitigated with careful planning.

CCE has some significant concerns

with recommendations in the Draft Plan. The Draft Plan supports drilling in the Marcellus Shale performing formation for natural gas. Drilling in Marcellus Shale will require a process known as fracturing, a process which poses serious potential adverse impacts to ground and surface water. Extracting natural gas and other natural resources should not adversely impact quality and quantity of drinking water or surface water.

CCE supports rigorous environmental review, public involvement, and full disclosure of the risk to our environments and public health. In addition, the State Energy Plan should explicitly state the sensitive and unique areas that should not be drilled in.

The Draft Plan supports new nuclear power for New York State. No new nuclear power plants have been built or became operational in our country in

decades. It's no wonder why high risks, exorbitant costs, and legacy waste come along with nuclear energy production.

The legacy of toxic waste that persists from the use of nuclear energy turn to contaminate our drinking water and land for future generations. Nuclear waste does not make our nation more energy independent either, as the vast majority of uranium currently used for nuclear energy is imported from other countries, such as Russia.

CCE also is concerned with potential for desalination in Rockland County and other locations throughout New York State. The desalination process uses an immense amount of energy, sometimes ten times or more the amount of traditional measures for water extraction. The Plan needs to address conservation and efficiency for water which is linked to energy use to avoid these energy-intense proposals.

Lastly, CCE strongly urges the

board to develop a strong plan for implementation in the final report, which is lacking in the Draft Report. While a report with great information, recommendations, and goals is important, without a clear plan for implementation, it lacks effectiveness. Thank you for your consideration.

MR. CONGDON: Thank you very much. Just a point -- because we heard this from other folks -- about the implementation plan, the intent is to have a detailed implementation plan for the final. We provided broad recommendations, and throughout the public hearing process and the written comments we received, we intend to fill in with some additional detail in our last chapter what will be a detailed implementation. Thank you.

Our next speaker is Theo Batista? I'm sorry. Your handwriting is difficult to read.

MR. BREITENSTEIN: Theo

HEARING

Breitenstein, B-R-E-I-T-E-N-S-T-E-I-N, president of EMACX Systems. We are an energy technology company, I'm here to testify on behalf of NYSERDA. I appreciate the opportunity to the Planning Board that I am able to speak.

We have been working with NYSERDA over eight years, and NYSERDA has made millions of dollars of contribution to our company and also to our end users saving over 3,000 tons carbon footprint reduction and saving obviously also the customer millions of dollars.

From the beginning NYSERDA has made an effort to understand our technology in the area of conservation, energy conservation, and look at our product from every side. NYSERDA -- what I really appreciate is that NYSERDA's engineers are really hands-on program managers. They're in touch with not only companies such as ours, but also with the end user out there to see, you know, how they can promote their

objective of really energy conservation and how energy -- efficient energy measures can be taken.

Through the practical and hands-on approach, they aligned themselves with the program -- the energy conservation program on every level. When I say that, I mean with the city, with the State, and the -- ultimately when we look at what's happening on a national basis, it's also aligned with that.

Over the years NYSERDA has made it easy to participate in the programs. We are working with utilities and incentive programs, providers nationwide. I can only say that NYSERDA is probably to me personally still the best in the country. Whether that is with the initiatives to promote energy conservation, but also to educate the people out there looking to participate in programs.

Then also, they have really

realigned their applications process, streamlined it, so to speak, so that there is very little red tape there. I also appreciate the ongoing PR efforts NYSERDA is doing particularly in the area of education. I have -- really one of my passions is to educate people out there what can be done in regard to energy conservation, and NYSERDA has really taken on that role as well.

Now, let me make a suggestion going forward. As I said, EMACX systems is really focused on demand control and demand response. Now, when one considers the grid as an optimal functionality of the grid, people take energy efficiency measures.

In the United States -- as I have seen being European and having 25 years of experience in the energy efficiency conservation energy business, in Europe we don't take demand response measures. We take efficiency measures and we take demand control, peak load control,

measure and with that we stabilize the grid. The grid is therefore very well managed. Demand response measures are not really common in the United States. We do not focus so much on demand control, intelligent peak load control, or peak load control measures.

I would highly suggest that under the initiative the Mayor of New York City does with green greater New York forming legislation, but also with NYSERDA, maybe to look more closely into the area of demand control, how can you promote it? How can we take it to the next level in order to make a substantial contribution to stabilize the grid and also eventually towards the Smart Grid?

Again, I appreciate all NYSERDA does for New York State and this community to promote energy efficiency measures and conservation. I can only applaud. Thank you.

MR. CONGDON: Thank you very

much. Thank you for the kind words about NYSERDA. We're lucky to have them in State government. Of course, they couldn't do what they do without the funding supported by the Public Service Commission, which approves a lot of the programs that NYSERDA administers, so I also want to recognize the PSC.

MR. GRANNIS: And the ratepayers.

MR. CONGDON: And of course, the ratepayers who provide the funds. Thank you, Pete. Our next speaker is Mary Ellen Paravalos from National Grid.

MS. PARAVALOS: Good afternoon. I'm Mary Ellen Paravalos. I'm a vice president at National Grid on the electric and gas utility surveys on customers across the State of New York. Thank you for having me. I'm really happy on behalf of National Grid to be able to give you some comments today.

National Grid congratulates the State Energy board for releasing the Draft Report. Obviously a lot of great

work by a lot of people, and so we think it's a great step in the right direction and we look forward to working with folks towards a final plan later on this year.

We share the Governor's vision for a clean energy economy. It is what is required to stimulate investment, create jobs, protect health in the environment, and meet the energy needs of New York State. We were pleased to see that the Draft Plan surfaces a number of critical issue towards achieving that objective.

Achieving the State's goals will require leadership from both policy makers and from utilities that provide energy services across New York State. And National Grid stands ready to help with that objective.

Today I would like to comment on three issues that would be critical to the successful implementation of the State's energy and environmental

objectives in the areas of energy efficiency, clean energy resources, and infrastructure investment.

Energy efficiency, a priority resource in the plan, as it should be. It's a really important tool at our disposal to help meet the energy efficiency goals. It's a tangible way for customers to manage their energy costs and at the same time reduce their climate change footprint.

But achieving New York's ambitious energy-efficient goals will require a close partnership across policy makers and regulatory State utilities and NYSERDA, so we need all hands on deck on this one, policy makers and regulators setting the right policies with the right targets, and then NYSERDA, the utilities, and energy service providers getting on with the job.

We need to streamline the energy efficiency program approval process and

have more flexibility in designing and implementing those programs. We've had a lot of success in the past by a lot of parties, but these targets that we're now working towards obviously are very aggressive and we need to be able to move quickly with bigger impact across a wider population, and so that's going to require that we streamline things and be able to move quickly.

National Grid's energy efficiency team will be providing input on specific actions that we think will help move in the right direction. We'll be providing comments on that in October as well.

Clean energy resources, another important priority for New York. We fully support the State's efforts to utilize and grow New York's renewable resources. It is important for customers that we enable renewable energy in a cost effective manner. Using utility deployment for solar and other renewable energy sources can help

here and we can deploy across a large number of customers quickly and investing in the transmission system as required to bring those renewable sources of power, deliver them through the system to the customer load areas.

The transmission system is the backbone upon which we will be able to reach this energy future and it's important we have enabling transmission policies in the areas of planning, siting, cost recovery to help New York reach its goals. Deploying Smart Grid technology is also a key enabler to tapping into opportunities for clean energy in New York.

National Grid recently filed with the Department of Energy a Smart Grid program for New York that would serve 82,000 customers across New York and is really geared to help folks manage their energy costs, but at the same time to accelerate learning about how to integrate renewable resources,

distributed resources, electric vehicles, and more into the grid.

So we encourage the board to develop action plans to help us get renewable resources to customers in a cost effective way. And again, National Grid will be providing its views on actions to help with that.

More generally, as the Draft Plan recognizes, achieving New York's goals will require considerable investment in the energy networks and infrastructure, and National Grid stands ready to help with this investment, but we cannot do it without a supportive investment climate.

New York's policy and regulatory framework must provide for timely recovery of costs and industry standard returns to be able to provide the kind of investment that will bring the investors' money into New York rather than other states.

So again, thank you very much.

I'm very happy to be here and part of the ongoing dialogue for New York's energy future. We look forward to continuing to work with you, other entities, customers, and all to help reach this energy future. Thank you very much.

MR. CONGDON: Thank you very much. Our next speaker is Chloe Tribich.

MS. TRIBICH: My name is Chloe Tribich. I'm from the Center for Working Families, which is a nonprofit organization that's currently in the process of preparing for the implementation of the Green Jobs Green New York Program. Some of you may be familiar with it.

It's an unprecedented energy efficiency retrofitting program that would use a government-regulated private investment fund to retrofit a million homes and businesses in New York State in five years.

HEARING

So just to express thanks to the members of the -- of the board for putting forth the Energy Plan that we're here to talk about. I just want to point out a couple of things in relation to the Plan.

One is that it's -- the Center for Working Families believes that it's a great start. We think in order to meet even more ambitious goals, such as reduction of 80 by '50, we would need to take into account a few elements.

One is the strong need for a science based or whole-house approach to energy and energy efficiency. It's not enough just to replace a boiler here or furnace there, but we need to understand how the entire structure works in order to maximize efficiency.

The other element is fuel-buying programs with FEC dollars. It's not fair to require that electric customers whose electricity is efficient not to be able to use that funding for other

energy efficiency retrofits. Again we think fine-line programming would allow us to meet even more ambitious energy efficiency goals than those that are already set out.

Finally, I want to emphasize the importance of continuity of programming. Contractors and community groups and building owners have helped plan their futures and planned their businesses based on the wide and extremely valuable array of NYSERDA programs that currently exist, and the recent PSC decision to dramatically reorganize the multifamily program, I think, has been -- has presented enormous obstacles for contractors and for others who depend on the continuity.

And it's difficult to maintain trust and bring all these crucial parties together to work towards energy efficiency if it's going to be problematic of people like that.

And then finally the last point

that we want to make is about job standards. We believe that any energy efficiency plan that -- that can be -- that can truly bring all the necessary parties to the table and make sure that a green economy and a just economy should include job standards that address the needs of low-income communities and their contractors. That's all I have for today. Thank you very much.

MR. CONGDON: Thank you, Chloe. We're going to take a five-minute recess, and we will reconvene in five minutes if there are further speakers who wish to provide a statement. Thank you very much.

(A brief recess was taken.)

MR. CONGDON: I'd like to thank everyone for attending today. There are no further names on our list for folks who wish to provide a public statement, so we're going to gavel out here. Thanks again for everyone's

participation. We greatly appreciate the feedback. Thank you.

(Time noted: 1:27 p.m.)

C E R T I F I C A T E

STATE OF NEW YORK)
:
COUNTY OF NEW YORK)

I, MICHELE MOSKOWITZ, a Shorthand Reporter and Notary Public within and for the State of New York, do hereby certify:

That this is a true and accurate transcript of the proceedings held on August 21, 2009.

IN WITNESS WHEREOF, I have hereunto set my hand this 26th day of August, 2009.

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MICHELE MOSKOWITZ