
DRAFT 2009 NYS ENERGY PLAN

PUBLIC HEARING

Date: August 18, 2009

Time: 10:00 a.m.

Location: Kingston Theatre
Miller Campus Center
34 Cornell Drive
Canton, New York

Before: Thomas Congdon, Chair
NYS Energy Planning Board

Frank Murray, President and CEO
New York State Energy Research and
Development Corporation

Judith Lee, Executive Deputy to the
Chairman of the NYS Public Service
Commission

Peter Iwanowicz, Assistant Secretary for
the Environment, Governor Paterson's Office

William Little, Esq., NYS Department
of Environmental Conservation

MR. CONGDON: Good morning and welcome. This is a hearing to accept public comments on the 2009 draft State Energy Plan that was released on August 10th, 2009 on the Energy Planning website, www.nysenergyplan.com.

The plan was issued in accordance with Executive Order Number 2 which was issued in April 2008, and called for the creation of the State Energy Planning Board and tasked the Board with preparing a State Energy Plan.

The Plan consists of a main volume, along with seven assessments and nine issue briefs that provide more in-depth supporting information for the volume.

This is one of nine public hearing sessions we are holding to hear your comments. Future sessions will be held in Manhattan, Buffalo, Binghamton, Long Island, Brooklyn, Albany, Kingston and Utica.

Written comments on the draft plan will also be accepted through October 19th and information on submitting written comments can be found on the Energy Plan website.

If you decide to submit written comments, please do so as soon as possible so they can be

carefully considered. All public comments, whether oral or written, will be reported to the Energy Planning Board for its consideration. They all count equally regardless of how they were received and will be considered in the development of the final plan to be released the end of 2009.

My name is Tom Congdon, and I am the Chair of the State Energy Planning Board and Deputy Secretary to David Paterson for energy. My job today is to gather information from all of you.

I would like to introduce to you other members of the planning board. To my left is Frank Murray, the President and CEO of the New York State Energy Research and Development Corporation. To my right is Judy Lee, who is the Executive Deputy to the Chairman of the Public Service Commission, Garry Brown. She's Garry's designee today. Peter Iwanowicz, who is the Assistant Secretary for the environment, David Paterson's office. He is designee for the planning board member Judith Enck, who is the Deputy Secretary for the Environment. And next is Bill Little, who is here from the Department of Environmental Conservation, the designee for Pete Grannis, the Commissioner of the DEC.

The process today is simple. Those who want to comment at this hearing have been asked to sign in upon arrival. And those who have pre-registered on the Energy Planning website will be called upon to speak first. Walk-ins will be allowed to speak as long as there is time remaining in our hearing time frame.

Your name will be called one at a time to speak. Please come to the podium on stage to my right, and when your name is called you can come right up to the podium and provide your statement.

A court reporter is here to provide a transcript to the board of everything that is said today. It's very important there be only one speaker at a time so that 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 is also very important that those in attendance be courteous to the speaker so his or her comments can be transcribed accurately by the court reporter.

If you provide a statement and have a written version with you, it would be helpful if you would provide that to us either today or following the

hearing so we can provide those to the court reporter to assist her in providing the transcript.

All speakers are asked to focus on issues that pertain to the draft Energy Plan only.

Your comments should be as succinct as possible so that we can hear from as many of you as possible. We have set a five-minute deadline for that purpose, but of course after everyone has had a chance to address the Board repeat speakers may be afforded another five minutes.

Formal presentations, such as PowerPoint, aren't being allowed today. Again, our goal is to hear from as many of you as possible.

As this is a statement hearing, the Planning Board isn't entertaining questions. This is an opportunity for us to receive feedback on the draft plan.

Those who want to comment but do not want to speak publicly, or don't get a chance to do so, again, can submit written comments via our website. And, again, that's www.nysenergyplan.com.

Our expectation is that this hearing will run for up to four hours.

With that, I want to thank you all again for

coming today, and if there are any questions about the process we can take those at this time.

Seeing none, I will call our first speaker, John Charamella.

MR. CHARAMELLA: Hello, my name is John Charamella. I'm a small solar energy business here in New York and I promised to address some issues here from the New York Solar Energy Association.

Just a few quick talking points here is we would like to be able to create a long term plan that provides clear incentives to develop 2000 megawatt load by 2017.

We always here our Governor say he would like to be this great solar state and lead the country and whatever, but in order to do that we have to have a clear concrete plan and we don't have one. So, it would be really nice if we started working on that in detail.

The next point, provide a solar solution to the 51 percent of the State's energy consumption using heat and hot water. Just an interesting point: The largest solar heating system in the country is at Fort Drum. That's something that we could really use in the State to help promote solar heating. If it couldn't work why would the government, why would the Army spend

so much money to make it work at Fort Drum? It can work. We have more examples of that other places in the State.

Next point, institute a New York State government solar energy purchasing program. If the State really got on board and decided that in State projects that go forth from this point on were going to use a certain percentage of renewable energy in those projects at the beginning, then that would be a great incentive for New York State. But, again, it's getting the wheels turning, greasing that wheel to get moving.

Recognizing the unique value that PV and solar thermal systems provide and employ in different areas and applications. One great example is solar power water heating. It's the best bang for the buck, everybody knows that, but in New York State there is very few incentives other than the tax credit.

I really think that what NYSERDA should be doing is giving people a rebate for solar hot water the same way they give people a rebate for solar electricity because, when you think about it, most people that do have solar hot water, at least my customers, are saying I get this electric hot water heater and I'm spending 80 bucks a month for a family of four. What can I do?

And they hear about incentives, the rebate for photovoltaic, I'm sorry you don't have that for hot water. So, I think that's something we can look at having NYSERDA incorporate in a rebate program.

As we all know, the best power plant is the one we don't have. If we really look at consumption and the average home that has a hot water heater, at least 50 percent of it.

And another point is to change the commercial net metering laws, make it more flexible so that businesses can look at being able to see a clear pay back when they are investing in solar. Just make it very clear and having a real long term approach because, as you know, money is what drives the energy.

If an investor can't see that I can look at getting a pay back way down the line, they might look elsewhere, or seeing that a pay back on some other industry is going to get bigger bang for their buck right away. So, you have to give investors that incentive.

Anyway, thank you very much.

MR. CONGDON: Thank you.

Our next speaker is Louise Jensen.

MS. JENSEN: Good morning.

Thank you for this opportunity to comment.

The State's '80 by 50' goal is very ambitious and requires everyone's willing participation to achieve it. It will require partners, and we are one of those partners, working with NYSERDA, to really fulfill that '80 by 50' goal on the ground.

Not only to the partners, we would like to also encourage synergy between the agencies and to the programs in order to better enhance the partnerships and see results. That is one of the key elements that we see being here in the communities working, that disjointed problems that we see working with State government.

We are a non-profit. We successfully worked with NYSERDA for the past seven years to transform the North Country/Adirondack Park to a region where each resident is energy aware and each building is energy efficient.

We have a particular goal, CES, on low-income, local government and small business. We look forward to continuing our partnership with NYSERDA, and in particular, those programs that dovetail with our mission, and those include Home Performance, Local Government and Energy Star Homes Program, EmPower and

the Multi-Family Performance Program that is currently under review.

CES has the distinction of being honored with our management with NYSERDA to be the first multi-family program in the State and that achieved 27 percent savings, exceeding the minimum 20 percent.

In terms of the elements of the plan, in particular, using energy more efficiently, we could not support that goal at this time. We really believe very strongly there is latent potential in improving energy efficiency both in terms of achieving the State's greenhouse gas emissions reduction goal, as well as in stimulating economic growth.

Awareness, education and access to programs to assist homeowners and small businesses in this region are critical. Access we believe to be the most important.

Access, in our estimation, is ease of learning about and entering into the programs. It's difficult very often for small businesses, for a homeowner, to access. It's one of the key things we consider part of our role, but it doesn't always come through to us.

Affordability of entry into an energy

efficient lifestyle, and the availability of products and skilled service providers is also important.

The disjointedness, again, between the different programs, between Department of State and Social Services and NYSERDA limits the ability to learn and entry to programs especially for low-income, who are not able to decipher and wander through all the different programs on their own.

In addition to the perceived conflict or idea that there's a lack of affordability in having an energy efficient lifestyle, whether it's perception or truth, continued incentives and rebates are very important to get past that here on the ground in the North Country. Otherwise, those press points or that perception will prohibit low and moderate income households.

In addition, in the plan, investment in energy and transportation infrastructure and in-State energy supplies is a double edged sword for those of us in the North Country. We would like very much for you to think about that.

We are a region poor in jobs and very poor in household income, yet we are rich in energy resources, such as wind, hydro and biomass, both wood

and grass.

Energy is being generated but being transported out of our region, and program funding is disproportionately targeted toward urban centers, where our energy is going.

We ask that any investment must look at ongoing compensation to the communities whose resources are going to the expansion of in-State energy supplies and generation.

Historically, it has been very difficult for us up here to compete for funds, which are typically awarded based on population density, putting rural regions, not just the North Country but the Southern Tier, at a distinct disadvantage.

We are particularly pleased, though, with the Plan and support improving end-use energy efficiency programs, especially the measurements and reporting. The challenge is the disjointedness across the agencies, how to accurately capture cumulative reductions and savings.

We have a hard time here as a program learning about all of the programmatic savings, and it's additionally challenging when we are looking at different agencies, how do we get that clear path so we

can demonstrate success.

Updating of the Energy Code, that is so critically important, as well as improving training of code officers to enforce that advanced code. Without enforcement it will not happen.

We are thrilled to see the link to real estate transaction disclosures. We cannot leave out the building trades. Architects to engineers and contractors are pivotal to that success of that program.

In addition, the focus on low income households must continue, at least in the North Country. A large percentage of our homes are low income households and they need that help, who are particularly vulnerable and whose economic status can be most directly impacted by savings in energy costs.

We also appreciate and encourage your continued focus on public buildings, but please encourage a holistic approach across the agencies, looking at whole communities, not just the municipal buildings.

I know it's easier to hold municipalities accountable, but they have an opportunity to really be a leader and to be a role model and to set the standards for housing authorities and public housing as well as

individual homeowners and small businesses in their communities.

In addition, thank you so much for addressing the financing. Very often, as we work with clients of NYSERDA here in the North Country, where the challenges are faced is when we look at incentives and we look at rebates and we look at the gap in funding and finding the financing to complete the program for those building owners or homeowners. That is the most critical piece at the moment to move on very quickly so that we can get buildings that are already in the pipeline to closure and see results.

So, thank you very much.

MR. CONGDON: Thank you very much.

MR. MURRAY: Louise, I wanted to ask you a question. In the Saranac Lake multi-family housing project, you mentioned that there's 27 percent energy savings for that project.

MS. JENSEN: Yes.

MR. MURRAY: Do you know how much of that was electric and gas?

MS. JENSEN: I don't offhand. Our program manager -- Ann, do you remember how much was electric and how much was gas?

MR. MURRAY: That would be fine. Just send it. I was just curious how much was electric and what was gas.

MS. JENSEN: We will e-mail it to you this afternoon.

MR. MURRAY: The other question I had was something you could probably provide for the record down the road. You mentioned three or four times the disjointed State agency policy compactions and that's something we always struggle with.

More specifically, can you cite cases where that disjointedness occurred and then provide us with specific suggestions how to avoid that in the future.

MS. JENSEN: We can follow up with that.

One in particular is the disconnection between -- I will do it from the constituent standpoint. If you look at it from the end user point of view, I am homeowner, I am low income. If I go to the county office I will learn about the weatherization program and I will go to the weather agencies here in the county and CDP, they are a wonderful organization, and they will come in and do weatherization, but what I won't learn about is all of the other opportunities to continue the work in my home.

I won't learn about EmPower. That might dovetail and that's something that the weatherization team might not bring me. I won't learn about all the loan programs that might be available to me. I won't necessarily get the educational part of EmPower.

So, to get these agencies not just at the top, but all of us in the field, to work together and sort of come from above. What we have done is we have created a little bit of a cheat sheet that we use with our clients that show them how to access information, so that at least they learn about all the programs they would be eligible for, but then they need to navigate that themselves, which is sometimes easy and sometimes not so easy.

MR. MURRAY: Let me suggest you react to this idea. When we are implementing NYSERDA, the economic stimulus package, the Governor's Office, Department of Public Service particularly, to put together a website that's institutional so customers and clients can go to and identify not just the programs with NYSERDA and the potential assistance of them, but all of the programs that various State agencies have.

So, in effect, one stop shopping at least for informational to go to one site, website, and learn

what programs are available if you are a school, hospital or non-for-profit.

Would something like that in the residential sector be helpful?

MS. JENSEN: Very much so. Also talk to Department of State. Social Services agencies have done a website like that so there might be a way to link them as well.

MR. IWANOWICZ: You mentioned that a large percentage of the homes here are low income. If you could provide that.

MS. JENSEN: I would be happy to.

MR. CONGDON: Thank you very much.

Our next speaker is Tony Collins, President of Clarkson University. Thank you, Tony.

Good morning. My name is Tony Collins, President of Clarkson University. Thanks for the opportunity to be here this morning. Thanks for the comments. I am actually deferring comments for our provost Tom Young who is going to speak as well. I'm happy to provide some written comments.

I would just like to speak from a little broader perspective this morning. I'm a board member of the Solar Energy Consortium, the strongest

public/private sector organization committed to bringing a solar powered future to New York State.

The first speaker, John, I would like to endorse his comments. I'll get to a couple specific suggestions as to how we can perhaps pull all of this together.

I am also the President of the not-for-profit Seaway Private Equity Corporation that invests in start-up businesses in St. Lawrence County. We started a number, seven companies in total, three of them focused on alternative and renewable energies.

I'm also Executive Board member of the Metropolitan Development Authority of Central New York, a board member of Syracuse Center of Excellence in Environment & Energy Systems and Director of New York Business Council.

So, with those positions that provide I think a framework, I would like to provide my comments in perspective of New York State in terms of economic development and how the green area can, in fact, not only solve environmental issues but provide a springboard for economic development.

And also Clarkson's knowledge and activity in those areas, that provides a foundation that the

university is regionally important in an area that is really important to all of us.

So, in that context, I would like to make some brief suggestions.

I would like to specifically advocate NYSERDA consider three initiatives to assist the aggressive development and commercial implementation of renewable alternative energy opportunities.

First would be issues -- and this perhaps gets to the first speaker -- how can we pull all of this together. Issue competitively awarded PONs, Project Opportunity Notices, to not-for-profits, such as TSEC, Solar Energy Consortium, to support their efforts that focus on promoting the research and development of alternative industry technologies in New York State.

Support for organizations like those -- there are a number of them, many of them are fledgling. They are not well resourced. If there was some Project Opportunity Notices presented I think you might see two or three of those emerge as strong and that would, in my mind, link all of the industry and research activities together. We like advocacy across the State and that's something that NYSERDA can support.

And then bridging off the advanced

technology, they have what they call Mini-CATs, that if NYSERDA were to fund such activities I think it could commercially promote the use of different NYSERDA selected technologies.

Examples would be small mini turbines that produce heat and power and utilize, through various sites. We need to do something, obviously, to get away from coal and gas-fired plants, but Mini CATs, the research conducted to industry. We have seen a very successful application of that in materials at Clarkson and elsewhere across the State. So, Mini CATs might focus on industry and university research could essentially end up generating jobs in this field that would be useful.

And then my third point is that those Mini CATs could specifically look at a program called Grants for Growth at the MDA, Metropolitan Development Association of Syracuse, Central New York. That is now eight rounds of funding. There are about 60 grants that have been awarded that connect individual factors of research activities with industry problems and have a very specific aim of either creating new technologies or enhancing any existing technology.

That program has been very successful across

the board. If we connect these Mini CATs, supported by NYSERDA, a look at that program would be something that would be very specific to address a lot of the questions or comments so far, and that is get us all on the same page and focus our energy resources.

So, thank you for the opportunity to make these comments and good luck. It's a great issue for our times. Thank you.

MR. CONGDON: Thank you.

Our next speaker is Robin McClellan.

MR. MCCLELLAN: Good morning. My name is Robin McClellan from St. Lawrence County.

Energy conservation is the single most effective and the only approach that yields immediate results. Let me say that again. Energy conservation is the single most effective and the only approach that yields immediate results.

Anything else in the plan needs to be secondary to that. That's the only thing that will get things happening now and those things last.

I also wanted to briefly address the improved coordination of end use efficiency programs administered by the State's utilities and consistently measure and report results and objectives in strategy

one.

As Louise mentioned, there is a lot of disconnect, that it's not just between NYSERDA programs, it's between programs for CDPG grants and housing consult, and overcoming that is clearly something that will make a difference.

Low income housing is not the easiest housing to work on. It's often more difficult. It's often more expensive but it usually yields great results. The problem with the low income, the weatherization programs and all the programs that are focused on low income is they are low budget, and it is by definition in our culture low income and low budget. It's always a struggle against that. It's a cultural thing. It's endemic in our culture and it's something that works against the end results of the program.

The other aspect of that is coordinating data collection and not only data collection for measuring results and efficiency and effectiveness, but also holding on to the data so that later on when you are going back on this house that's been in one program for five years, and five years later it's eligible for another program and you go back and see what's done so you are not rebuilding things.

The other aspect of that, in terms of coordination between programs, is putting money in so that the money from different programs has a synergistic effect instead of duplicating effort.

On the energy code, this standard has changed progressively over the years, but it is time to overhaul it. While it has expanded beyond specifying simple minimum R-values for walls and ceilings, there is still another quantum leap that needs to be made. That leap is understanding that the "state of the art" is a fleeting thing.

Yesterday's 2 by 4 construction with fiberglass batts was "state of the art". Acknowledging the transient nature of codes leads to developing building design that is flexible and easy to retrofit.

So, one of the building criteria should be for energy efficient buildings is not just they are energy efficient today, not that they take advantage of today's technologies, but that they will be able to take advantage of tomorrow's technologies.

I think that, more than anything -- when you look at some of the buildings up here, 1950s, those are -- they are very difficult to retrofit. They are no more difficult to retrofit than the stuff built in the

1960s, but we need to change that.

The other aspect of the code is that it is limited by the availability of appropriate materials. By laying out a schedule of increasing standards, materials suppliers can respond to that demand.

In addition, having a two tiered code, part is minimal standards but also laying out a preferred standard, a higher standard, that will eventually become the standard, allows for a growth of that code. And it's going to by definition change over time until we get to the point where we can heat a house with a heated conversation.

Ensure energy efficiency programs reach low income customers, that's just the most important thing and it probably is the biggest drain on the system.

Smart Grid, I am really hoping that Smart Grid will obviate the need for a larger grid. I don't think the answer to our energy problems is developing a grid that wields more power. Wielding power is expensive. I strongly support reducing vehicle mileage travel.

I do oppose the development of the Marcellus shale gas formation and I can tell you why. It has to do with responsibly managing energy resources. We

should not be developing new ones, clear and simple. I don't know much about the project, I just don't think we should be developing anything but renewables until we are able to manage our energy responsibly.

That's it.

MR. CONGDON: Thank you very much.

Our next speaker is Tom Young, Clarkson University.

MR. YOUNG: Thank you, Mr. Congdon and the members of the panel. I'm very pleased to have the opportunity to speak before you this morning. I do have copies of my presentation.

Again, my name is Thomas Young. I am a resident of Potsdam, New York and the Provost of Clarkson University. Coming after Tony Collins, I am here to say a few things about Clarkson's students.

In that sense, I represent the nearly 2,600 undergraduate students at Clarkson University and 450 graduate students, 200 faculty and 350 other staff members; 36,000 alumni, and 30 trustees.

For the record, I am also a tenured faculty member at Clarkson and I began my career at Clarkson in 1977. I did my research and teaching in the areas of environmental impurity, principally in the areas of

water quality. Energy was always in the background.

I want to get into a few facts and figures about Clarkson. This teaching and research enterprise, if you will, has energy bills. We face energy bills in terms of electric energy usage in excess of $2 million per year and over $1 million per year for natural gas used to power, heat and light the campus.

That's a bill that represents five percent of our annual budget and in terms of the number of students on our campus, it's about $1,000 per student every year. So, it is not a small number. It is significant to us.

We are concerned about the availability of reliable, low cost electric power and natural gas. As an institution, we are certainly well informed about these issues, and not just as consumers, but also because we prepare our graduates to go into the workforce in areas that hinge directly on the energy industry. As you may be aware, a number of our graduates have been leaders within the State of New York in positions related to energy.

Such organizations as NYSERDA, the Public Service Commission, New York Power Authority, and on the private sector National Grid, and a number of other

investor owned private electric utilities. Some within the State and some outside of the State as well.

Part of our relationship, as President Collins mentioned his activities within the State of New York. The number of connections that we would have from a venerable institution that is 113 years old does become very large and very diverse.

So, having said all that, with Clarkson's talent in the right places, and the abundant hydro power all around us, we still pay some of the highest rates in the State. That is a concern.

The building that we are in is roughly 10 miles from the Raquette River. The Raquette River flows north out of the Adirondacks to the St. Lawrence River, which, of course, is our border with Canada.

The Raquette is the second longest river within the State. It does have the distinction as being the most dammed river in the State for low-head power production, and is, in fact, one of the most dammed rivers in the nation.

Nevertheless, the power that's generated through those low-head facilities doesn't benefit the residents of Northern New York as it does those of downstate. So, to an extent, we see that it is clearly

an issue of environmental justice, which is a key issue in the State Energy Plan.

Relatedly, the Moses-Saunders Power Dam. The St. Lawrence Seaway and the power project are certainly engineering marvels, but as a matter of environmental and economic justice, the people of this area do look to the Power Authority and the State government in other areas to find innovative ways to grow the local economy from the electric power revenues that are generated from the dam at Massena.

Currently, much of that power, and the revenues from that, are reserved for economic development for purposes outside of industry in the area. Again, that does continue to be a concern.

Clarkson University is recognized as an engine of economic growth in the North Country of New York and we believe, as the economic growth engine, the university merits continued participation in the Power Authority's Power for Jobs program. It's been very beneficial to Clarkson and other colleges and not-for-profits across the State.

New Yorkers I think justifiably are proud of the diversity of their State; the diversity of the State's economic mainstays will require continued

economic development incentives, such as the programs like Power for Jobs program.

Clarkson University competes successfully for alternative energy research and development and education projects funded by the State and by federal entities.

Looking at such areas as photovoltaics, solar-thermal, small wind, biomass, energy efficiency, and fields such as -- that do impact other areas, such as climate change, all of which are critical to the achievement of the State Energy Plan's very ambitious and laudable energy efficiency goals, decreasing the new fossil fuel generation plants and lowering emission levels all at the same time, of course, it won't happen without help.

It is simple to say that greatly increased, intelligent, well-directed spending in alternative investing, if you will, on alternative energy research and development, those are very helpful in that regard.

As Tony mentioned, he is helping us with that connection between university and industry.

We do fully support New York's Renewable Fuels Roadmap and Sustainable Biomass Feedstock Study to fully assess the effects of existing State policy on the

development and use of various renewable fuels. We do, of course, support greater appropriation support for ongoing projects in these areas.

We do have a couple of Clarkson faculty in the audience today. I think they, towards the end of the program, will be willing to speak a bit about their engagement in that.

Professor Stefan Grimberg is here with some of his graduate students. Professor Diabold is here as well. And Tony had mentioned the Center for Advanced Materials, the Advanced Technology Center that Clarkson has, and the Deputy Director for that Center, Jack Prendergast, is here as well and Jack may have a few words to say.

I thank you very much for the opportunity to speak. I do have my testimony before you.

MR. CONGDON: Terrific. Thank you very much.

MR. MURRAY: Tom, I have a question for you, please. Along the theme of increased coordination and cooperation between universities and industries in R&D, are you at all familiar with the program that SUNY Binghamton has put together, industries down in the Southern Tier. I think that accomplishes exactly what

you are talking about.

MR. YOUNG: Related to solar energy?

MR. MURRAY: Looking at a variety of renewable energy technologies. Solar is one.

I raise that only because I am curious if you are not familiar with it -- there may be no reason why you should be -- I'm curious in having you look at that model and letting us know if that model might be something that is adaptable up here in the North Country.

Down in Binghamton, I wasn't aware of the program. They seem to have their act together along the theme you are talking about. Might be something you could replicate.

MR. YOUNG: Very encouraging. I'm quite familiar with the Grants for Growth program that Tony mentioned. I have been on the review panel since the outset.

By the numbers Tony mentioned, this also is doing a pretty good job of making industry and universities. I certainly will take a look at the Binghamton model and provide some comments on it.

MR. MURRAY: Thanks.

MR. YOUNG: Thank you.

MR. CONGDON: Our next speaker is Stephen Geier, UniStar Nuclear Energy.

MR. GEIER: Good morning, my name is Stephen Geier, and I am a Vice President of New Nuclear Site Projects for UniStar Nuclear Energy.

It's very good to be back in the North Country. I am a Clarkson grad and I have lived and worked up in this area for several years.

I would like to thank Tom Congdon for holding this and the Energy Planning Board.

On behalf of UniStar Nuclear Energy, I applaud New York State for its extensive process and analysis resulting in a draft Energy Plan that is committed to the promotion, deployment, and advancement of clean, safe and reliable energy.

More specifically, the plan recognizes the important role that new nuclear energy must play in meeting New York State's future energy needs, combatting climate change, and creating good American jobs.

As the nation moves towards a carbon-constrained future, New York State is positioned to be in the lead in the development of advanced nuclear generation. Nuclear energy supplies the non-carbon, 24 hours a day, 7 days a week power that is necessary to

help secure a clean energy future for New York.

Nuclear facilities are a critical complement to wind and solar projects, which are limited and produce electricity intermittently. Three sources combined provide a balanced clean-air energy portfolio.

Nuclear energy is an effective, proven way to combat greenhouse gas emissions. In fact, studies have shown that lifecycle carbon emissions are comparable to other renewable sources of energy, such as wind, geothermal, and hydro.

Additional nuclear energy facilities will fuel the State's economic growth and can combine with renewables to keep New York's air clean and safe while improving the State's energy supply, pricing, and reliability.

The US nuclear industry for many years has been helping supply America's need for electricity in a safe and secure environment. The current fleet of nuclear energy facilities is among the safest and most secure facilities of any kind in the world.

Nuclear energy technology and know how has expanded so that today's advanced reactor designs include improved safety and security features. The advanced designs, along with regulatory oversight and

guidance, ensure that America's nuclear fleet will continue to be among the safest and most secure facilities in the world.

UniStar Nuclear Energy is a strategic joint venture between Constellation Energy and EDF Group, and is considering the Nine Mile Point Nuclear Station site in Oswego for an advanced nuclear energy facility. This project exemplifies the principles outlined in the draft Energy Plan.

Currently, Constellation Energy owns and operates the Nine Mile Point Nuclear Station, a two-unit nuclear energy facility, and Ginna Nuclear Plant, a one-unit facility. Both sites play a vital role in the Central New York economy.

For example, as one of Oswego County's largest employers, Nine Mile Point provides critical economic support to the surrounding community, including 900 very good paying jobs, nearly $100 million payroll in 2008, and more than $25 million in property tax revenue to State and local districts.

UniStar Nuclear Energy is committed to meeting the region's needs for clean, safe and reliable energy. Adding a new facility at the site would expand employment in the area and, perhaps equally important,

add more future revenue to New York's tax rolls.

A new facility at Nine Mile Point will provide approximately 4,000 jobs during construction, with about 400 well paying permanent jobs during the operations of the plant, expanding the tax base, providing more revenue for critical but financially strained county for services.

On the average, nuclear energy facilities add significantly to State and local tax bases, and generate approximately about $430 million in total output to the local community on an annual basis and nearly $40 million in total labor income.

The economic benefits of nuclear energy facilities extend well beyond jobs. Each dollar spent by that nuclear facility generates about another $1.07 in the local economy, according to the widely used IMPLAN model for estimating direct and indirect economic impacts.

It is important to note that the expansion of the Nine Mile Point could be financed without burdening New York's ratepayers.

The existing Constellation Energy nuclear fleet has an outstanding safety record during the almost 40 years it has been in operation. In fact, in 2009,

Nine Mile Point and Ginna were both recognized for outstanding safety program by achieving STAR status under the OSHA Voluntary Protection Program. STAR is the highest rated designations given by OSHA and the federal government.

The Constellation nuclear energy fleet is routinely among the nation's best for safety and operational factors based on industry performance objectives. UniStar's proposed new nuclear facility is based on that same commitment to safety and operational excellence.

Although new transmission projects are not necessary to proceed with construction of our Nine Mile Point facility, we support a long-term transmission strategy that would improve the capability to effectively move electricity from upstate generation facilities to metropolitan New York, one of the largest demand load centers in the country.

Nuclear energy is the keystone to any plan to curb carbon emissions effectively while supplying reliable, safe, and cost effective electricity. Nuclear energy can reduce our dependence on fossil fuel power plants and foreign sources of energy. It is a technology of today that will continue to provide even

cleaner, environmentally friendlier energy for generations to come.

Thank you for the opportunity to address the board and provide input to this process.

MR. CONGDON: Thank you, Stephen.

Any questions for Stephen? Thank you.

Our next speaker is Ben Foote from Coakley Carpet One Ace Hardware.

MR. FOOTE: Good morning. My name is Ben Foote. I am the local manager of our store in Canton, New York. Coakley is a locally owned business. It's been operating since 1902. We have one store here and one store in Saranac Lake.

We have been very active in the NYSERDA program for several years and have appreciated being selected as their featured partner of the month. We also work very closely in CDP on their weatherization programs.

One issue is the windows they put in in the weatherization programs are windows that meet the bare minimum for Energy Star ratings. For just a few more dollars Coakley could put windows in these homes that far exceed the Energy Star rating that has now been used and for years to come save these low income people

money.

We also have had the opportunity to work with NYSERDA and we see it as a win/win situation for ourselves and our community. We have had the opportunity to help educate the public about energy conservation and have had great success converting customers to CFL bulbs and now turning them on to LED bulbs.

We have an electric meter in our store, we are putting in a regular incandescent light bulb that show how much energy there is using CFL and now LED, and the LEDs just blow everything else right out of the water.

Right now we are working with the Village of Canton and the Village of Saranac Lake in switching all their Christmas lights to LED Christmas lights. Coakley's takes part in several energy fairs and seminars. We have had seminars in the stores about energy conservation.

We sell replacement windows, dehumidifiers, air conditioners that are all Energy Star compliant. Over the years we have seen our customers become much more aware of energy savings and the environment.

The NYSERDA program has allowed us to become

more involved in their energy buying decisions. We would definitely like to see these programs expanded.

NYSERDA has an advertising incentive that has helped us to dedicate more of our time and more of our money to educating the people about how they can save money.

Thank you for your time.

MR. CONGDON: Thank you very much.

Our next speaker is Michael Newtown from SUNY Canton.

MR. NEWTOWN: Good morning. I am an Assistant Professor here. I am a professional engineer and I teach here in our renewable energy program and I also do work with NYSERDA, Hudson Valley for energy and science program for contractors. We also are engaged in trying to get the habitat going up here.

Couple of comments that I saw in the Energy Plan. First, I would like to comment you and your staff put together a plan. I would like to see a little more how you are going to implement some of it.

The recommendations are good. I, as an instructor, trying to convince the public we should be changing the renewable energy issues need to know how the State wants to get there.

Couple things that I see -- and I deal with contractors trying to change the BBI -- is the issue between code enforcement and contractors, getting them on the same page. We talked earlier today about interagency discussion about working better. That's primary to building homes and being able to be more efficient.

We at SUNY Canton just got approval for a class in BBI as a continuing education credits for code enforcement. We are doing a class this weekend.

The other is the homeowners and business owners. I saw mentioned in your report that there is introduction to mass media type advertising. Currently all I see as an engineer out there is stuff on PBS that's advertised at the end of the show for five seconds, five minutes tops, to promote the need to get this up in mass media.

We need to have the average citizen in New York State get an education on how this works and how they can improve the life style. Without that, anything I do here at the college is just an uphill battle.

I get contractors wanting to be changed. We will provide New York State with the work force that they need to change the energy situation in the State.

I guess at this point I am confident that we can help and I look forward to employing the State of New York to help the State get to where it's got to go.

Thank you very much.

MR. CONGDON: Thank you for hosting us today.

Your comment on implementation was a particularly good one. The intention of the Planning Board is to develop a more detailed implementation plan that will be inserted into the final State Energy Plan. Feedback we are getting through the public hearing process will inform us on specific action items we need to take to accomplish our recommendations and strategies. That's a very good point we do appreciate.

Our next speaker is Stefan Grimberg from Clarkson.

MR. GRIMBERG: I am Stefan Grimberg, I am Associate Professor at Clarkson University. I've been involved with renewable energy and specifically found ways to assist in the energy process or projects. I want to speak to that. I appreciate the opportunity to comment on the plan.

Biogas for waste, as well as grass, is an important renewable energy resource recognized in the

plan. It's not a very large one. Certainly, the advantage is being it's a continuous resource, continuous renewable energy process.

Unfortunately, in New York State, only about 50 percent of the cows are on very large farms and would be cost effective to build continual anaerobic digesters for farms.

The other 50 percent of the cows are on very small farms, on relatively small farms, so it's not cost effective to build single anaerobic digesters.

The current incentive structures, net metering is not applicable for community methods, which would be a resource for smaller farms where they can pool, essentially, their waste together and be cost effective on a larger scale.

So, relaxing the net metering to allow community digesters for an increased percentage of non-farm waste to be added to farm digesters would significantly improve the economics of digesters and therefore allow you to tap into that resource, farm resources.

And I think that's the point I wanted to make. Thank you.

MR. CONGDON: Thank you.

Just to get clarification, non-farm waste?

MR. GRIMBERG: The net metering law at the current time allows going up to 25 percent of non-farm waste to be added to a digester so you can still net meter. If you were to increase that percentage over 25 percent or more then the farmer should be able to receive more energy rich material.

MR. CONGDON: Could you give us some examples of actual non-farm waste?

MR. GRIMBERG: Cafeteria waste from restaurants, waste from dairies, cheese manufacturing processes. That material can also be added to the digesters. Any energy rich feedstock. Municipal waste.

MR. CONGDON: Thank you.

Jerry Haenlin from National Grid is our next speaker.

MR. HAENLIN: Good morning. I am Jerry Haenlin. I am representing National Grid here today. Thank you for the opportunity to speak.

National Grid congratulates the State Energy Planning board on its issuance of the draft State Energy Plan. The Draft Plan represents a monumental effort by the Board and its staff with input from hundreds of stakeholders.

The State Energy Plan should provide an excellent roadmap for New York's energy future, as well as a useful picture of where we are today.

National Grid is very pleased to see that the Draft Plan surfaces a number of issues that will be critical to New York's energy and environmental future, and we share the Governor's vision for a robust and innovative clean energy economy that will stimulate investment, create jobs, protect the public health and the environment, and meet the energy needs of businesses and residents reliably, safely and affordably over the next ten years.

National Grid supports the energy resource priorities established in the Draft Plan, notably increased energy efficiency, renewable energy, and pursuit of greenhouse gas reductions in the energy portfolio.

Achieving the State's goals will require leadership both from policymakers and utilities that provide energy services to New York customers.

National Grid stands ready to take action to help the State achieve its energy and environmental goals.

Today, I wish to comment on three issues

that will be critical to the successful implementation of the State's energy and environmental objectives.

Number one, energy efficiency. The draft plan identifies energy efficiency as the priority resource for meeting its objectives, and sets a ‘15 by 15’ goal of reducing electricity use to 15 percent below forecast levels by 2015.

As we all know, energy efficiency is the most effective way both to help customers manage their energy costs and to reduce their carbon footprint. It is the win-win solution for customers and the environment.

Achieving New York's ambitious energy savings goals will require a partnership of policymakers and regulators, the State's utilities, NYSERDA and energy service companies.

We need, first of all, hands on deck -- NYSERDA, the utilities, and energy service companies working together -- to reach this target.

We also need to streamline the energy efficiency approval process so that we all can bring energy savings to our customers as quickly as possible. Our customers are eager to take advantage of the programs we are proposing.

We also need flexibility in the implementation of new energy efficiency programs so that utilities and other providers can work effectively with their customers to achieve the '15 by 15' goal.

Number two, we need clean energy. As the State Energy Plan recognizes, renewable energy is another important priority for New York State.

National Grid fully supports the State's efforts to promote renewable energy as another way to improve New York's energy security and combat climate change.

It will be important for our customers to support renewable energy in as cost-effective a manner as possible.

Utility deployment of solar and other renewable energy resources is one way of reducing the costs of these new technologies.

Also, investing in transmission to deliver renewable energy from remote locations to customer load centers will be critical for ensuring that customers can take advantage of the benefits of New York's renewable energy development. Transmission is the backbone that moves clean, reliable energy from its point of generation to the customer's door.

New York's State Energy Plan should give due consideration to the issues of financing, permitting and building transmission projects to deliver wind and other remote clean energy to New York customers.

Investing in the Smart Grid is also key to tapping the opportunities for clean energy in New York.

National Grid recently applied to the US Department of Energy for funding for a New York Smart program that will target approximately 82,000 customers in the Syracuse and Albany-Capital areas. This program will enable us to help our customers to manage their energy costs, and learn how to integrate renewable resources and electric vehicles into the energy grid of the future.

We encourage this board to develop action plans that will bring the benefits of new technology and renewable energy to our customers in the most cost effective way.

As the plan notes, clean energy development in New York presents an economic development opportunity and the potential for new jobs, and National Grid stands ready to work with the State and local communities to make this a reality.

Number three, infrastructure investment.

National Grid stands ready and is eager to make this investment in New York's energy future but we cannot do this without a supportive investment climate.

New York's policy and regulatory framework must provide for timely recovery of costs and industry standard returns in order to attract the investment needed to achieve the goals articulated in the State Energy Plan.

Thank you again for your attention and the opportunity to speak here. National Grid looks forward to working in partnership with the board, the State, other utilities, stakeholders, and most importantly, our customers, to implement the Governor's vision for New York's energy and environmental future.

Thank you.

MR. CONGDON: Thank you.

Our next speaker is Eric Gustafson from the Massena Electric Department.

MR. GUSTAFSON: Good morning. Thank you for the opportunity to be here this morning.

My name is Eric Gustafson, I'm the General Counsel for the Massena Electric Department. I want to first say that this electric department is supportive of the goals of the draft State Energy Plan and applaud

your efforts to reduce the net retail price of electricity, to reduce reliance on energy imports and fossil fuels, to reduce possible negative health environmental impacts of those fossil fuels to lower peak demand, to relieve transmission and distribution bottlenecks, all the while attempting to create jobs.

We believe New York, with your assistance and leadership, can accomplish these goals; however, we see one important omission from the plan. That is is that the plan should ensure that all licensed hydro is treated equally under the State renewable portfolio standard.

Massena Electric Department is currently pursuing a unique multi-purpose hydro electric facility and may not receive the benefits of the renewable portfolio standard because it's considered a new project. Hydro projects must undergo a rigorous licensing process that sets forth the conditions for meeting environmental and generation goals.

The process is open and transparent, giving all stakeholders an opportunity to participate in the licensing process. In Massena Electric's example, those agencies involved include the Army Corps of Engineers, the Department of Environmental Conservation, New York's

Department of State, the St. Regis Mohawk Tribe, and those are only a partial list of the parties participating in FERC's licensing of this facility.

As such, a successfully permitted project, after completely vetted, should not be treated as a lesser type of renewable standard or resource.

While we applaud the goals as outlined in the State Energy Plan, we believe it should recognize projects like Massena Electric's and other similar projects for what they are. That is an integral part of a laudable goal.

Thank you.

MR. MURRAY: Eric, one consideration on that particular issue, Judy might be helpful here. The Public Service Commission is in the middle of or about to embark upon a cross-examination of the RPS program and what changes in energy will be incorporated going forward. I would encourage Massena Electric, if you are not involved in that, to become involved and to use that as a mechanism as well.

Ultimately, short of legislation, it's a decision to be made by the Public Service Commission.

MS. LEE: I would ask them to reach out to you directly about that RPS process as it's ongoing.

MR. CONGDON: Our next speaker is Jason Clark.

MR. CLARK: Good morning. Thank you. My name is Jason Clark. I am the Director of EnCon Development in Massena, New York. I'm here to speak primarily about the idea that energy policy can help stimulate income growth.

As I think everyone here will agree, this is an area that's very much in need of economic stimulus. Speaking specifically Massena, this is an area the community lost General Motors facility, have been impacted by secondary and tertiary supplier markets.

We have a number of brownfield sites that are basically or have been developed over the course of years relative to industrial growth and the decline in the region.

I have written this up because, as I understand, this panel has some weight in terms of helping to select sites for bringing component manufacturing operations, and I would request that you strongly consider Massena and the North Country as one of those sites or as a series of those sites.

Myself and colleagues from other situations in the North Country spent numerous hours in trying to

recruit particularly wind turbine manufacturers. On behalf of my organization, our thought is that as a State, as a community, as an organization, we can help change the energy paradigm by using low cost hydro to sort of change the energy paradigm to produce these three components -- wind components, solar components -- again, using what's already available and it's proven to be environmentally sound to help produce additional energy that's also environmentally sound.

I think on behalf of Massena, probably be as good as anywhere else in the country. As I said, we are dealing with the downturn in the General Motors, dealing in downturns in Alcoa.

On a whole as a region, this was discussed earlier, this region is probably the poorest in the State in terms of per capita income. The five northern counties of New York State make up what's otherwise known as the North Country, have been among the five worst counties in the State almost consistently for the last 50 years.

That's something that hasn't changed. We have worked feverishly for decades to try and remove that stigma from the area. I believe the energy policy can help us focus on helping accomplish that.

Thank you, and I certainly hope you consider Massena as part of any decision the panel may recommend.

Thank you.

MR. CONGDON: Thank you, Jason.

Our next speaker is Wade Davis, the Executive Director of Ogdensburg Bridge and Port Authority.

MR. DAVIS: Good morning. My name is Wade Davis, I'm Executive Director of Ogdensburg Bridge and Port Authority. And first of all, on behalf of the North Country in general, thank you very much for holding this public hearing here at SUNY Canton. It's vital that local officials, local folks, concerned citizens, have input into this overall process.

As I mentioned, I am Executive Director of Ogdensburg Bridge and Port Authority, Vice Chair of the Alliance of Municipal Power. I'm a certified manager and auditor. I'm a Community Energy Services board member and also a concerned citizen of Northern New York.

Renewable energy sources, as pointed out in the plan, are extremely important. Requires flexibility of generation and transmission options. The ‘15 by 15’ goal and the ‘80 by 50’ goal requires partners,

specifically North Country partners.

The Bridge and Port Authority and other North Country affiliated companies are willing to become partners in the implementation of this plan. For example, we have several bridge piers located in the St. Lawrence River ideally suited for running river turbines, which are proven technology.

We have existing bridge infrastructure providing a potential link to the Canadian grid to import additionally. The Port of Ogdensburg is potentially exporting bypass materials which could be used for renewable generation and combined heat and power projects here in the State of New York.

I want to keep my comments brief today, but one thing I did want to point out is energy is the base of economic development, and I would urge this panel to consider the strategic partnerships with existing North Country entities, such as you heard today, from authorities, universities, both public and private, and existing entities like Community Energy Services.

Thank you.

MR. CONGDON: Thank you.

I am very pleased that Senator Aubertine has joined us. Senator Aubertine is the Chair of the Senate

Energy Committee. If you would like to make a statement.

Senator.

SENATOR AUBERTINE: Good morning. Welcome you all to this area of the State, my area of the State. And I certainly want to recognize the Governor as well, and all of you for initiating the series of hearings here.

I think that this region of the State on many different levels is unique in a very positive way in that generating facilities, transmission lines, some of the largest users, industrial users, the largest industrial user of electricity in the State is in the region. We have nuclear plants and so forth.

Our goal is to have affordable energy when and where we need it and that's something that I believe is certainly attainable, whether it's residential or a large mega user, as I said, as we have in this region of the State.

I believe that we are today, anyway, we are moving beyond the days of a relatively simple generation and distribution system and we are moving to the next level of generation and distribution that will include all forms of alternative energy, as well as

conservation, and the use of existing energy projects, and possibly the replacement of generating projects as well.

I think existing generation and transmission needs to have a hard look taken at it, clearly. These are some of the initial steps in that direction.

The idea of on site generation is something that seems to be taking on a life of its own more and more so, not only limited to industrial and commercial users but even small users. Users even in a residential setting are looking more and more into the opportunity, ability to have on site generation.

Transmission, I think there are many things that are being looked at certainly from an engineering standpoint, but also from the standpoint of changing the way we transmit energy altogether, looking more and more at things like DC, direct current, such as the Neptune in Long Island. I think that all those type of things will no doubt have a role to play in this comprehensive plan that's being drafted.

The storage of energy. The concept of storing energy is something that's been around literally for a millennium. It goes back to the Egyptians, if you want to go back that far, storing energy by simply

storing water.

We have right here in this country we can go back 150, 200 years, you have mill ponds which store water, store energy for use. Taking that same concept, we worked on -- I am sure you are all familiar with the Niagara project and others that use that same concept, and certainly a much different technology, but, again, expanding, on that with some of the new pump storage station to help us meet the peak demand when it's needed.

I think that this area of the State offers many unique opportunities. This campus, for example, has made one of its roles to help educate the work force in the future, to help them be better positioned to work on energy needs, such as solar, wind and so forth.

Clarkson really -- no pun intended, I don't know if Tony's still here or not -- is a power house. It really is. Clarkson University is really on the forefront of engineering many different types of alternative energy, and they certainly -- Canton College, the University as well will play a role, I believe, or have a role to play in the comprehensive plan.

I am also the Chair of the Standing

Committee on Agriculture and I don't think we can necessarily talk about energy, alternative energy or otherwise, without having a role to play for agriculture.

Again, this region of the State is unique, a lot of open space, a lot of agriculture, a lot of potential, whether that's issues you are all familiar with, whether corn ethanol or methane digesters, and the list goes on.

Agriculture is also a major user of energy as well, so, I think that any discussions going forward need to have agriculture. That needs to be threaded through the whole plan as you take a more comprehensive look at it.

Finally, one of the things that I think needs to be part of the plan is the importation of energy, both long term and short term. I, as Energy Chair, have started a dialogue with Quebec Hydro. I am certain that Tom and others are very familiar with the importation of Quebec Hydro Now power.

I think that having that figured or factored in as part of our long term energy plan certainly has a major role to play as well.

So, I think that I really do, I applaud you

starting initiating this series of public hearings right here because I really do believe this is a unique region of the State. We share that border with Canada. We have a lot of agriculture. We have a lot of currently existing generation.

We have the largest single user of energy right here in our back yard. We have residential users in this region of the State. If you have not had an opportunity to drive around a little bit it can be very sparse and very expensive to distribute.

I think, as this plan is developed, to take those and all the other factors that have been brought to you so far and will continue to be brought to you, take all those into account, I think we still will need to have a good working comprehensive energy development plan.

Again, I want to applaud all of you and the Governor as well for taking this step to put this plan in place.

MR. CONGDON: Thank you, Senator. I want to thank you for your leadership as Chair of the Senate Energy Committee. Despite an otherwise tumultuous session, legislative session, you were able to have a productive session from extending the Power for Jobs

program, and also the statutory planning process. You have cemented energy planning going forward so that this body won't be subject to future gubernatorial administrations' executive orders but rather it will be a permanent place in planning for government.

So, we applaud your leadership and thank you. Look forward to working with you.

SENATOR AUBERTINE: Thank you. Look forward to working with all of you. Thanks.

MR. CONGDON: That is all of the preregistered names we have at the table, so we will take a five-minute break and let others register and if there are others who would like to provide statements we will reconvene.

Thank you.

(Recess taken.)

MR. CONGDON: At this time I would like to reconvene. There are a number of other folks who would like to provide statements. The next speaker is Jack Prendergast from Clarkson University.

MR. PRENDERGAST: Good afternoon.

I want to follow up with just a few comments, I won't take long, from Tony Collins and Tom Young's statements.

My name is Jack Prendergast. I'm the Deputy Director of CAMP, which is Center for Advanced Material Processing, at Clarkson University. CAMP is one of 15 centers that are sponsored by NYSTAR, and the principal behind that is for NYSTAR is for economic development and job creation across New York State.

What I do is I, as Deputy Director reporting to Dr. Babu at the center, I interface with industry and the other universities across the State to try to reach out and bring research projects and programs back to the CAMP center, where I work with about 35 professors, and attempt to get projects, programs that are funded either by the company or in joint by the companies and other organizations, such as NYSTAR, who we know very well on projects. And those projects then have the master's and Ph.D. students working on these advanced programs.

Now, materials is a very broad term so we get involved in a lot of things. In the energy area, we spoke about solar. We do biomass. We do wind. There are other programs. But in your proposal on page 42 you have one paragraph basically which is on solar thermal.

And we also know people very well at the TSEC down at Kingston, New York. We have been engaged with them for two years or so in the University looking

at areas where we can do research with companies in New York State and, again, to bring industry to New York State.

What we would like to see is manufacturing done in New York State and job creation in New York State. So, that's our effort.

The group, the TSEC Group, which has been working to bring PV manufacturers to the State of New York, they have successfully come to bring low metallurgic to Niagara Falls, which is a very good project. I go up to that area every two to three months to see the progress they made on the plant.

This plant will be producing polycrystalline solar, which could then be upgraded to single crystalline which would be used for single crystalline PV cells. The hope is that the material that they produce will then go to another manufacturer in New York State up along Massena to produce PV panels here in New York State rather than in China, Germany, Spain, other countries around the world, for installation in New York State and the northeast corridor, which is probably the largest market in the US. That is how we get involved.

Now, solar thermal. They have asked us to engage to see if we can't help bring solar thermal, a

little bit more knowledge and understanding of what's going on and bring that to New York State.

So, we have been working with members from industry in Canton and the University on our own. So, we have been in contact with companies in the Central New York region in solar thermal work.

The first gentleman, John Charamella, Borderlands Energy, spoke about most of the energy used in the home, 51 percent used for heat and hot water and air conditioning. That's a lot of energy.

If you cannot have boilers, whatever, you can pull the energy out of air, etc., for the heating or hot water on the sun using hot water solar panels. He also talked about one installation, which is at Fort Drum, which is a solar wall installation. It's supposedly the largest solar wall I believe in the United States. It's here in New York State.

I have not been to see it yet but I am going. I am working with a professor at Clarkson, Dr. Doug Moles, who is going to be technical advisor in this group. And our goal is working to put together a road map for solar thermal expansion in New York State. This is something you will need in your report.

That's our goal is to put together this

project, and so we are attempting to form a solar energy consortium in the State.

We have been at this now for some period of time. The aim is to have a meeting in Kingston, New York at Tech City on October 20th where we will kick off probably the first two meetings. These are intended to be a small group of key members from industry, from universities more than just Clarkson University, to have education become a key component of this.

We will have to train people to install these units, etc, to sell these units. At the University we hope to benefit by being able to look at new advanced modeling, different pump systems, trying to increase efficiency of systems by one, two, three percent. It's a big, big difference on energy. And for the State the advantage of this would be deferred power plant installation.

Now, this is not new. What's going on here in New York State for New York State is where we may have 500 of these installations across the State for hot water. Places like Germany are installing over 20,000 units. Spain has been big in this. Greece has been big in this. California has got a pretty big program in this area. It's all to defer energy

generation and a lot to do with deferring carbon initiatives.

I will take any questions. Thank you.

MR. CONGDON: Thank you very much. I'm glad you raised the example about metals. It's one of the economic developmental strategies that the State has linked our energy policies to really important economic development projects. Thank you for that.

Our next speaker is Mark Venczel from Clarkson.

MR. VENCZEL: My name is Mark Venczel from Clarkson University. I am a Ph.D. candidate working in the environmental science and engineering department program at Clarkson.

My research is on environmental impacts and how alternative energies, renewable energy technologies affect different environmental impacts, positive and also negatives.

I want to just comment on the importance of considering how a new technology, or developing incentives for a new technology can impact the environment, which I didn't hear too much of today. More about economic development, and those two overlap very closely.

In particular, the renewable portfolio standards and their relationship with price premiums put on renewable energy as an incentive to develop them.

I think it's really important to quantify those price premiums based on an in depth understanding of the bigger perspective of how environmental impacts are changed with renewable energies, different technologies for renewable energy.

Also with corn ethanol and it looks really good if you just look at the aspect. If you take the big picture approach, all of a sudden it's not so hot and you have completely the opposite of what you expected.

I've actually found the same thing when I was looking at anaerobic digestion. There are benefits, and it looks really beneficial across the board, but the biggest impacts are actually not where you are looking at the beginning. More related to nutrient emissions to the environment rather than fossil fuel use.

I am not downplaying anaerobic digestion, it's an important technology, but it's really important that some of my preliminary results have been surprising. It's important to take a big picture approach. So, that was one thing.

Second, there was very little if anything in the plan regarding education. And I have done some environmental education in high school classrooms here in Potsdam, next town over. Doing that, being experienced in that, I understand the importance of educating the younger generation about why these things are happening and why we need to develop a new Energy Plan, and why it's so important.

So, probably this plan that we are talking about today is not associated too much with education, but I think it would be really important, even if not providing funding for education, or even guidance, but to at least mention the importance of education, have a section in there to sort of acknowledge the fact that we know how important education is successfully, K through 12 education.

Lastly, just to comment on a real subtle topic that is kind of a pet peeve of mine. So, Robin was up here earlier and he said energy conservation is the single most important and immediate thing we can do to reduce our energy use. You guys responded yes, we agree.

We have lots of things about energy efficiency in our plan, but there is a real significant

difference between energy efficiency and energy conservation.

Energy conservation means doing less. Energy efficiency is more about how do we do the same or more with less energy. And they are both really important, but conservation is more direct than efficiency, and sometimes efficiency even leads to increased use of energy because you have more stuff that's made more quickly that can be used more and all of a sudden you have more energy use when you expected to have less.

So, it's important to make that distinction. So, that's it. Thank you for giving me a chance to speak.

MR. CONGDON: Thank you for speaking.

If you haven't had a chance, all of our assessments and issue briefs of the analytic foundation for the plan are all posted on our website.

One of them deals with environmental impacts of various energy generation resources out there. Check it out and we would be happy to entertain comments if you have any.

Thank you.

Our next speaker is John Charamella from

Borderlands Technology.

Thank you for coming back.

MR. CHARAMELLA: One thing, I wanted to give you a kind of unique perspective on the industry. I started my first oil business in 1976 after Jimmy Carter put solar panels on the White House and I was inspired and I had a lot of customers and everything was going nice and rosy and then Ronald Reagan came along and pulled them off, and all of a sudden the rug was pulled out from myself and maybe others because there were no incentives.

So, the industry, unfortunately, for the past 30 years has been beaten around by economic political interests that were sometimes for and sometimes against. So, what you mentioned earlier about what you are doing now would be beyond the reach of executive order of the Governor I think it's very good. You will have some continuity of what we will be able to do in the future. Really be helpful to the industry. But one thing I think really has to be done is that we have to market the industry better. Give you an example. I was at an auto dealer yesterday and I asked him, how are things going? He says, we're selling trucks like mad. I said, How come? All that cash for

clunkers? We can't keep them in the showroom.

I thought, well, isn't that interesting. Here it is people are running out and buying the vehicle that the minute they leave the auto dealership it depreciates in value. That vehicle does not give any money in return and within five years it's worthless and they traded it in.

Yet, there is a solar energy system, be it hot water or solar electricity, the day you put it in starts making you money. It's designed to last 30 to 50 years and you get an immediate pay back and it's saving the environment.

Why is it that people will rush out and buy that vehicle and lose money from day one but they can't somehow connect in their mind I can buy a solar energy system and be ten times ahead of the game by doing it?

There is a disconnect there. The disconnect is the education in the marketing. We have to think about how can we make people realize that there is this opportunity out there that is so unique.

And the interesting thing: Solar energy will never be as cheap as it is this year because there's an overcapacity of solar energy panels being made in factory to the point where you can get an

installed system for $6 a watt.

That's a price we used to dream about. As capacity rose we will be able to lower the price. That's almost competitive with current electrical rates.

When you consider the average electricity rate goes up six percent of the year, that's the national average. When you buy a system today or the next couple of years with the incentives that are out there, savings are only going to triple and quadruple as time goes on.

So, that's something you have to think about. I'm sure there will be other people bringing this forward to you and I will gladly submit in writing some of my ideas. The marketing, how do we educate people better so they realize that this is an investment that far outweighs going out and buying a new truck or car.

Thank you.

MR. CONGDON: Great. Thank you.

Next speaker is James Waldon.

MR. WALDON: Good afternoon. Welcome to the North Country. My name is James Waldon, assistant business manager Local 1.

On behalf of my Union brothers and sisters

throughout Central New York and North Country I thank you for holding today's hearings and soliciting the input of people.

To keep the lights on, to revitalize our economy, our leaders in government must take a realistic and balanced approach to safeguarding our future. This will require New York continues to support clean, safe, reliable power sources, such as nuclear and hydro power, while supporting the continued development of alternative energy sources, such as the wind, geothermal, to complement New York's base load power and infrastructure.

As you know, the availability of affordable, reliable base load power is critical to creating jobs and stimulating investment in growing our economy. The Energy Plan has identified efficiency as the priority resource for meeting its multiple objectives.

And while we agree that energy efficiency and conservation should be vital components of any credible Energy Plan, we feel that the plan relies too heavily on increasing energy efficiency. No reasonable person is against efficiency, but it won't be enough.

There are many solid initiatives within this report, and in particular, I recognize the board for

supporting the creation of a new nuclear facility in New York State and supporting the construction of a new nuclear reactor, Nine Mile Point.

For the families and businesses who proudly comprise this region, I cannot begin to reinforce how vital is the support of this. In addition, we support the new power plant siting law and utilizing existing right-of-way for transmission improvements which are vital to making these two initiatives work. Thank you for that.

Despite these positive developments, our State is still facing growing demands for power. Even after conservation and efficiencies, the New York Independent System Operator still projects demand from power increasing into the next decade.

To maintain and enhance our quality of life New York needs to keep and expand its use of clean base load sources, particularly nuclear and hydro, which account for 53 percent of our electricity from coal.

Of particular importance is downstate's Indian Point energy center in Westchester County. What does Indian Point have to do with Canton and the North Country? Well, Indian Point supplies 100 percent of the State's power. It is in the midst of applying for a

license renewal.

Indian Point is a union facility with thousands of Union brothers and sisters either directly employed or as contracting work at the plant. In the current economic crisis, American job losses, who in their right mind wouldn't support a power plant that virtually emits no carbon in the atmosphere which hundreds of employees to keep it safe.

Friends and colleagues, much of this plan is to move the State forward and I salute you for the transparent process and, again, I salute you for having the vision to support critical initiatives, such as the new nuclear plant, new reactor at Nine Mile Point, as well as the proposed Jamestown carbon sequestration facilities.

These will help get our members back to work. So, on behalf of our members, I thank you for your time.

MR. CONGDON: Thank you. Our next speaker is Tony Collins.

MR. COLLINS: Thank you for the opportunity to just cover a few things I missed on the way through. One of them was I wanted to respond to Senator Aubertine's comment that we want -- the goal of this is

low cost energy. I don't think that's what we want.

I think what we want is responsible energy. And the energy that's there is available for what we need, but not just low cost energy any time, any place. That would not serve the goals.

It was mentioned pump storage, I am not sure what the efficiency of pump storage is, but it does seem like that's a good way to integrate many of these energy production forums that aren't continuous, like wind and solar, subject to weather and climate.

There are two other issues I wanted to touch on briefly. Primarily, NYSERDA programs. I'm working with BPI and I am certified to do energy analysis. When I looked at the engineering and how things worked that was fairly easy. What was really hard for me, and I have a pretty analytic mind, figuring out how the government structures and all the pieces fit together between NYSERDA and Honeywell and BPI and conservation.

It's a morass. And that's been I think a problem for getting contractors into the program, these institutional hurdles there. I understand there may be some things that are necessary about having kind of an intricate structure to keep things in hand at arm's length, but somehow it has to become more attractive for

contractors to become involved.

That's been a real big problem I think with the program. There needs to be some sort of a way for a contractor who wants to do this kind of work but doesn't really want to be involved in NYSERDA or the programs to be able to do energy outside of the purview of the current programs but still providing support to the contractor.

Whether they do it because of their political beliefs or not, wanting to get government involved, or do it because they are just not willing to navigate the morass of the paperwork, they still should be supporting those people.

The final point I wanted to make is some of the things that NYSERDA is developing, I am thinking of the software -- the program that does the energy analysis. That's a proprietary program owned by NYSERDA and the control of that program, availability of that program, is very limited.

I am not sure whether there is a reason I am not getting about that, and I understand that NYSERDA is not technically a government agency, but somehow along the line it seems that ought to be available for live use so that people can do good work even if they are not

involved in the program.

I think that would allow people to get a ramp up to getting involved in certain things as contractors.

Thank you very much.

MR. CONGDON: Thank you.

That is all the registered speakers we have at the table. We will take another 15-minute break and see if any other speakers wish to speak at that time. Thank you.

(Recess taken.)

MR. CONGDON: There are no speakers left on our list, so I want to thank everyone for joining us today at our first public hearing on the State Energy Plan.

I hereby conclude this session and we look forward to the remaining public hearings. Thank you all very much.

(Public hearing concluded.)