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    NEW YORK STATE ENERGY RESEARCH & DEVELOPMENT AUTHORITY
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           Public Hearing on the Draft Energy Plan 2014
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    DATE:
                    March 3, 2014
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    TIME:
                     1:09 p.m. - 4:58 p.m.
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    LOCATION:
                     SUNY Farmingdale
                     Little Theater at Roosevelt Hall
9
                     Melville Road
                     Farmingdale, New York
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    HELD BEFORE:
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    John Rhodes, President of NYSERDA
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    Judith Lee, Executive Deputy of the Public Service
     Commission
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    Jared Snyder, Assistant Commissioner of New York State
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     Department of Environmental Conservation
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    REPORTED BY: Jeanne O'Connell, RPR (518) 271-7904
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CHAIRMAN RHODES: Good afternoon, and welcome. My name is John Rhodes, and I am President and CEO of the New York State Energy Research and Development Authority and I am here today as chair of the State Energy Planning Board.

I would like to introduce to you the other representatives of the planning board joining me today. Judy Lee, Executive Deputy of the Public Service Commission, and Jared Snyder, Assistant Commissioner of the Department of Environmental Conservation.

Before we get started, some housekeeping.

First of all, thanks to our host, Farmingdale State

College. The exits are marked around the sides here.

The restrooms are out the doors and to your left around the curve.

We are guests here, so I will just go on record as asking for decorum in all these comments.

The prior hearings have been really exemplary in that respect, so it's been a very good process.

Also, we are joined by Terry Maromme of Public Access today who is going to be filming these proceedings. I think just as a courtesy to you, the

private citizens of the audience, I wanted to make you aware of that.

This is a hearing to accept public comments on the 2014 Draft State Energy Plan. It was approved by the State Energy Planning Board on January 7, 2014 and made available on the energy plan website, energyplan.ny.gov.

The plan was issued in accordance with Article 6 of the Energy Law. Public notice of the issuance of the plan and notice of the public hearing were published in the State Register on January 29, 2014.

This draft plan is the result of some serious, thoughtful work, and it envisions an energy system that is clean, flexible, affordable, resilient and reliable.

It lays out initiatives to achieve that vision that focused on five areas: Improving energy affordability, unleashing the power of private sector funding, providing a more resilient and flexible power grid to give customers more control over their energy use, aligning energy innovation with market demand.

Accordingly, the plan outlines long term policy goals, near term action items, and meaningful metrics.

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The draft plan consists of two volumes.

The first volume provides 15 key initiatives to advance the state's energy future.

The second volume addresses energy uses, sources and impacts, and provides a detailed background that was used to develop the overarching mission and the initiatives in the first volume.

This is one of six public hearing sessions that were planned to receive public comments. The remaining session is scheduled for Syracuse.

Written comments on the draft plan will also be accepted through April 30, 2014, 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 that they can be carefully considered. All comments, whether oral or written, will be considered by the Energy Planning Board as the board works toward issuance of the final energy plan. All comments count equally regardless

of how they were received. The planning board is targeting issuance of the final plan in the spring of 2014.

The process today is simple. Those who want to comment at this hearing have been asked to sign in upon arrival. Your name will be called one at a time to speak. When your name is called, please come to the podium to provide your statement. I will try to make a practice of also announcing the name of the following speaker, the on deck person, so to speak.

The court reporter is here today to provide a transcript to the planning board of everything that is said today. It is very important that 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. Also, she may call for a break. She is the only one who has that authority.

It is also very important that those in attendance may be courteous to the speakers so that

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 written version to us either today or following the hearing so that we can provide those to the court reporter to assist in providing the transcript.

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 should the hearing time permit.

Formal presentations, such as Power Point, are not 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 is not 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 do not get a chance to do so,

again, can submit written comments via our website.

Again, that's energyplan.ny.gov.

With that, I want to thank you all again for coming today, and ask if there are any questions about the process, and we can take any of those at this time.

SPEAKER: How are you indicating time?

CHAIRMAN RHODES: My colleague Carl has a coaching sign. Thank you.

Are there any further process questions?
(There was no response.)

Seeing none, I will call our first speaker. Warren Woodge, followed by Eleanor Krebs.

MR. WOODGE: Hello, I am Warren Woodge.

How many of you are tired of all the shoveling snow? Okay. Where have all the sidewalks gone? Long time passing. Where have all the sidewalks gone? Two months ago. Where have all the sidewalks gone? Under blizzards everyone. Oh, when will we ever learn? Oh, when will we ever learn?

Are you sick of shoveling all this snow? Fracking and fossil fuels and extra energy added to our atmosphere changed the climate, and cause more frequent

and more heavy snowstorms. So, we don't want that. We don't want it anywhere in the State of New York.

By the way, for those of you who don't know -- I am sure all of you do -- every Monday call Governor Cuomo 1-866-961-3208 and tell him to ban fracking throughout New York State. Tell him your name, where you live, and tell Governor Cuomo to ban fracking throughout the state. Again, the phone number, 1-866-961-3208. Thank you.

CHAIRMAN RHODES: Thank you very much.

Eleanor Krebs, followed by Gregory Atherton.

MS. KREBS: I am Eleanor Krebs. I'm from Farmingdale. I've lived here for 52 years. I love New York and I love Long Island.

I feel that fracking has proved in other parts of the country to be very harmful to the soil, air and water. Once you contaminate the soil, air and water you don't get it back again.

Fracking will not do us any good in the long run. It may be a temporary remedy to get a little more gas or oil from the ground, and it will help us a little bit, but in the long run we're going to have to depend on renewable energy like solar energy, wind energy,

water energy.

New York State and all over the country. For that matter, all over the world. We need to have renewable energy which does not harm our environment. It will not do us any good to frack a bit and postpone the day when we need to depend entirely on renewable energy, but that day will come and we don't want to destroy the earth.

I have called on Governor Cuomo to ban fracking in New York State. Thank you.

CHAIRMAN RHODES: Thank you very much.

Gregory Atherton, followed by Dr. Matthew

Cordaro.

MR. ATHERTON: Hello. My name is Gregory

Atherton. I am chief of staff for Assemblyman

Lupinacci. He apologizes to everyone for not being here
today. He's attending to his duties as a legislator in

Albany.

But Assemblyman Lupinacci, not only has he been a leader in education as a member of -- the ranking member of the higher education committee, but he also sees how education and the environment ties together.

For example, he was a big proponent of the

solar carport here on these very grounds at Farmingdale State College. He knows and hopes that that's only going to be the beginning of the research and the projects that are going to be following in the coming months and years.

Assemblyman Lupinacci has prepared a statement for today's meeting here. It can be viewed on Youtube at Lupinacci's Energy Plan. And he's always available for meetings in Albany and on his Long Island office, which is located in Huntington Station at 1783 New York Avenue. His phone number is 631-271-8025. That's 631-271-8025. Thanks for this opportunity.

CHAIRMAN RHODES: Thank you very much.

Dr. Matthew Cordaro, followed by Lisa Oldendorp.

DR. CORDARO: My name is Matthew Cordaro, and I have spent over 40 years within the energy and utility sectors, including service as the CEO of Nashville Electric, one of the 10 largest public utilities in the nation; and as the president and CEO of the Midwest Independent System Operator, one of the largest grid operators in the United States.

Long Island is my home and the place ${\tt I}$

cherish. It is this deep-seated affection for my community, along with my professional interests, that have kept me active on the issues of energy and sustainability, a key ingredient in safeguarding the fine quality of life we all enjoy from Merrick to Manorhaven to Montauk.

The governor's Draft 2014 State Energy Plan focuses on a number of positive initiatives that, if successful, will be good for all of Long Islanders and all New Yorkers.

These include the focus on improving energy affordability, promoting private sector engagement and financing, and working to bolster our electric grid.

However, there are a number of points within the plan that are debatable and require further consideration.

First, having been deeply involved in the industry for decades, I am reasonably sure that demand for electricity will ultimately increase despite the recent flat trend.

In 2009, New York put forth a goal of reducing electricity consumption by 15 percent by 2015, yet since that time consumption has grown by 2.5 percent at a time the economy has been soft.

Based on this, the state should be more realistic about the potential of energy efficiency initiatives, and openly accept that more generating resources will be required.

Second, there has been a troublesome trend among New York policymakers to trumpet the potential of relying more and more on out of state and even out of the country power resources. We simply cannot achieve more affordable power in New York in the long run if we do not increase the amount of in state power sources.

At present, efforts are underway to expand access to natural gas energy in New York, especially on Long Island. This is encouraging, because infrastructure constraints have caused the price of natural gas to significantly increase recently.

of particular importance is keeping our existing power sources, especially our state's six nuclear power plants, online. The ongoing campaign to close Indian Point, a major asset to New York's power supply, is deeply concerning because Indian Point provides 2,000 megawatts of reliable, affordable base load energy and serves as the foundation of our electric grid.

Long Island lost a major opportunity to have an affordable energy system when it prematurely shut down the Shoreham nuclear facility. This saddled Long Islanders with \$6 billion in debt and imposed some of the highest electric rates in the nation, which persist today.

I very much support the goal of working to unleash the power of private sector energy financing; however, there must be a level playing field for this to be effective. The state government cannot selectively subsidize some projects.

We should learn from Germany's mistakes.

The country's policy of heavy subsidies for intermittent power sources, specifically wind and solar, have driven energy costs through the roof.

A recent report from IHS, a leading global energy research firm, found that Germany's rising electricity costs are making the country less competitive internationally, and also found that the country will need to rely more heavily on fossil fuel sources.

While wind and solar can and should have a significant role in our energy supply, they are

inadequate alone to meet our energy needs. Until effective utility scale energy storage becomes available, which may be many decades down the road, we will either need base load energy sources, like coal, natural gas, nuclear and hydro, or we will need to have all intermittent power sources backed up by spinning reserves of natural gas power plants.

The latter isn't cost effective in the long run, to say the least, nor is it efficient and environmentally friendly. Along these lines, before the state commits \$1 billion to the Green Bank, we should clearly define how these funds will be spent, and study how these costs will impact and benefit ratepayers.

As you sit and construct the final plan, I urge you to look at the big picture of our energy needs, and how we can meet our growing energy needs while also supporting the state's economy.

And I encourage you to construct a final plan that builds on many of the positive initiatives that are outlined in the draft report, while also modifying those proposals that do not.

Thank you.

CHAIRMAN RHODES: Thank you very much.

Lisa Oldendorp, followed by Lou Sabatini.

MS. OLDENDORP: Thank you very much for this opportunity.

New York has a unique opportunity to lead the nation in renewable energy. To reach this goal, the energy plan for New York State must move away from increased investments in gas infrastructure, and must protect our families and water from the devastating effects of fracking.

Yesterday, I returned from a visit with my sister who lives in Edmond, Oklahoma, just outside of Oklahoma City. I arrived there on Sunday, February 23rd. Earlier in the day, at around two o'clock, a 2.6 magnitude earthquake was recorded just six miles north of my sister's home.

At 6:11 p.m. the same day, a 3.2 earthquake was recorded just 40 miles northeast of where I was staying. The next day, a 3.0 earthquake was recorded about 25 miles southeast of my sister's home. Then around 10:44 the next morning, a 3.2 magnitude earthquake was recorded a mere 20 miles northeast of where I was.

During the previous seven days, the US

Geological Survey reported 31 earthquakes in Oklahoma, including 27 with at least a 2.7 magnitude. Earthquakes have occurred in Oklahoma before, but never with the frequency.

experienced only one to three 3.0 magnitude earthquakes per year. From January 1st to February 20th of 2014, central Oklahoma alone has experienced 25 earthquakes of 3.0 magnitude or greater. In fact, the entire state of Oklahoma has already experienced 500 earthquakes of any magnitude since January 1st of this year.

Oklahoma is home to more than 4,400 deep injection disposal wells. A 2011 study published in the journal Geology found that liquid injection wells triggered a sequence of earthquakes in Oklahoma.

Katie Keranen, a geophysics professor at Cornell, says the evidence is strong that the earthquakes are caused by wastewater disposal, which has become more frequent amid today's boom in oil and gas drilling.

In addition, there are other dangers in the fracking process, which include escaping methane gas into the air, the 600 or so chemicals added to the water

used in the fracking process, many of which are toxic to humans and animals, the noise and air pollution from the compressors used to frack the wells, and the very high risk of polluting a town's, county's, or even state's water supply.

There is another side effect of fracking that has recently come into the spotlight: A shortage of clean water. In southwest Texas and much of Oklahoma there is a severe shortage of pure water. Fracking requires millions of gallons of clean, fresh water each time a well is fracked, and each well can be fracked as many as 12 times.

Fracking wastewater, a bi-product of the process, must be disposed of mostly by injecting it deep into wells often near fracking sites.

A desperate Texas has tried to buy water from Oklahoma. A huge lake near my sister, Lake Heffner, was a recent target. However, Oklahoma now has laws to prevent another state from taking its water.

To be sure, fracking will lead to future water wars as people search for new sources of clean, potable water. Once the water is contaminated, it can never be purified due to the added chemicals.

The people of New York do not want fracking to come to New York State. Nearby Pennsylvania is experiencing many of the same problems that are already present in prevalent states that have been fracking much longer.

New York into a clean energy future. Continued reliance on fracked gas and other fossil fuels will send us backward, not forward. New York's energy plan should lead the way by greatly increasing green sources, like wind and solar -- and greatly reducing dependence on gas and oil.

In reference to the last speaker's comments that wind and solar, I believe that Dr. Mark something, I can't remember his name.

CHAIRMAN RHODES: I am sure it's Mark Jacobson.

MS. OLDENDORP: Mark Jacobson, thank you.

Already presented Governor Cuomo with a plan to make New York State energy free by 2030. So, it can be done. There has to be a will to do it.

CHAIRMAN RHODES: Thank you very much.

Lou Sabatini, followed by Eric Weltman.

MR. SABATINI: I'm a resident of Massapequa.

A year and a half ago I had the unfortunate experience of sitting inside my house, watching my home being filled with water from the flood surge of Sandy.

It was a devastating experience, and thousands of my neighbors underwent the same experience.

An organization called 350.org has produced scientific evidence that there's a link between carbon that is being produced by fossil fuels and other sources that are dumped into the atmosphere, and the climate change that we have been seeing, the devastating storms, the monster tornados and hurricanes and so forth.

So, I strongly advise and advocate that we ban fracking from New York State, we continue to keep it out of New York State and keep it out of all the sources, because I think once the damage is done, it's going to be hard to reverse it. And the longer we wait, the more fossil fuels we burn, the more permanent damage we do to our environment.

Thank you.

MR. WELTMAN: Eric Weltman, I'm senior organizer with Food and Water Watch, a national non-profit consumer organization based in our Brooklyn

office.

I am here to urge Governor Cuomo to ban fracking, lead New York in a transition to renewable energy, as well as veto the proposed Port Ambrose liquified natural gas facility.

In October of 2012, Hurricane Sandy slammed New York, devastating communities across the region.

Even today, many victims of this climate disaster are struggling to pick up the pieces and put their homes and neighborhoods back together.

The question today, the question today is whether Governor Cuomo will be a leader in preventing further climate catastrophe. The question today, the question today is whether Governor Cuomo will lead New York in a transition to renewable energy, or deepen our reliance on the dirty fossil fuels that cause climate catastrophes, like Hurricane Sandy.

Unfortunately, Governor Cuomo's current

Draft Plan would maintain New York's dependence on

fossil fuels. It would enable a massive build out of

pipelines, compressor stations, storage facilities,

power plants, and other infrastructure, and would rely

on fracking in other states and stimulate the demand for

even more fracking.

Already, New York's landscape is becoming littered with dirty and dangerous infrastructure projects, from a compressor station in Minisink, to the Spectra pipeline in Manhattan, and even more being proposed, such as the storage facility in Seneca Lake, and Port Ambrose, liquified natural gas terminal off of Long Beach.

These projects risk public safety, our communities and the environment, and they enable fracking, which threatens our water, air, food and climate.

We want to highlight the imperative for

Governor Cuomo to veto the Port Ambrose proposal. This

is something fully within his authority and he should

act on it. Port Ambrose would threaten the shore

sensitive ecology upon which so much of our region's

culture, community and economy are dependent, and it

would promote more fracking, because contrary to the

proposed plan, the project is clearly being built to

export gas.

The threat of further climate catastrophe is particularly stark down in Long Island. Burning natural

gas will lead to dangerous levels of carbon dioxide; more problematic, fracking for natural gas releases massive amounts of methane.

Methane is an extremely potent greenhouse gas, 33 times more efficient at trapping heat than carbon dioxide over a hundred years, and about a hundred times more potent than carbon dioxide over 20 years.

The simple truth, the simple truth is that Governor Cuomo cannot lead on climate change and allow fracking in New York. Governor Cuomo cannot lead on climate change and rely on fracked gas from other states.

If Governor Cuomo has any hope, any genuine real expectation of attaining his goal of reducing greenhouse gas emissions by 80 percent, he must not and he cannot allow fracking in New York.

The bottom line is this: New York should not spend another dime on deepening our dependence on natural gas or enabling fracking here or anywhere.

Governor Cuomo should ban fracking in New York, he should veto the Port Ambrose LNG facility, and use the full extent of his authority to stop other infrastructure projects.

And he should lead, he should lead on preventing climate change by producing a plan that transitions New York to a clean renewable energy future.

Thank you.

CHAIRMAN RHODES: Thank you very much.

Clinton Plummer, followed Jay Blackman.

MR. PLUMMER: Thank you. My name is Clinton Plummer. I'm vice president of development with Deep Water Wind. And I would like to thank you for giving us this opportunity to speak. We are delighted to be here.

I would like to start by applauding the administration on its leadership in economic development and renewable energy policy. With innovative programs like New York Sun, New York Energy Highway, and the launch of the Green Bank, Governor Cuomo is comitted to being a leader in this position.

I would also like to commend the plan that has come out in its commitment to exploring resource diversity, the potential to use the plan to create economic development as an opportunity to explore replacement for retiring fossil plants, and as a means of promoting private investment.

I would like to request that going forward

the plan needs to take into consideration opportunities specific to Long Island. One of those opportunities is offshore wind, which lines up very well with all of those things.

Offshore wind has the ability to deliver energy cost effectively when and where it's needed by producing peak output during the middle of the day.

It also has the ability to deliver peak output during the middle of the winter when Long Island gas system is most constrained.

Offshore wind has the unique ability to create a large local industry that could put hundreds of people here on Long Island to work. We have seen this take effect all around the world. There are 58,000 people currently employed in the offshore wind industry globally, with potential to actually reach 200,000 by the end of this decade.

That's something that could be done here on Long Island. The US Department of Energy estimates that by 2030 there is as many as 70,000 jobs potential in just the US east coast alone. Even capturing a portion of that would be an absolute boom for the Long Island economy.

Offshore wind also has the unique ability to be cost competitive in delivering energy to a constrained coastal population, densely populated areas, where it's difficult and costly to deliver new forms of energy.

With that, I would like to ask that the plan consider opportunities to develop offshore wind, and for the state to take a position in the advancement of this new technology.

Thank you very much.

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CHAIRMAN RHODES: Jay Blackman, followed by Anne Hughes.

MR. BLACKMAN: I also would like to thank you for the opportunity to speak to you about something that I am very passionate about. My name is Jay Blackman. I am a member of MoveOn.org, public citizen, and Sierra Club.

I am here today to tell you how in March of 2012 I bore witness to a region of northeastern Pennsylvania that had been a bucolic, pastoral place, now turned into a nightmare for many of its residents due to hydrofracking.

We left Long Island as a group of

environmental people early on a Saturday morning. And it was a shock to get to the small farming town in Bradford County, Pennsylvania, when we had people board our bus from the area, local farmers, telling us that people were developing chronic cases of nose bleeds, gastrointestinal problems.

They told us that clinics had been set up by the hydrofracking company to take care of the many people who were becoming "mysteriously" ill, but had to agree not to talk to the press or anyone in authority as to the suspected cause of the illness.

The large tanks of potable water being delivered to their homes by the fracking company because their own water became undrinkable.

We were taken to a home in the area that had a hydrofracking well about 200 feet from the house of where we had been invited. We were shown brown water running out of the kitchen faucet. And also a constant flame of burnt off methane gas came from the top of a hundred foot structure over the well.

There also happened to be a dead cow lying in a field covered with insects, and someone in our group also noticed that there was an eerie silence due

to the lack of birds.

In addition, we were told during the week there persisted a constant parade of trucks carrying water, brine and chemicals on their local roads, causing noise, traffic problems and road damage.

From all that I witnessed and heard from residents, I hope that you are as convinced as I that you must not allow this to happen in our state. You must protect our families, our water and our infrastructure from the damaging effects of hydrofracking.

Our president has comitted our nation to energy by sustainable resources, like wind and solar. We must heed his vision and not allow the harm to communities as I have seen in Pennsylvania.

Thank you.

CHAIRMAN RHODES: Thank you very much.

Anne Hughes, followed by Roger Clayman.

MS. HUGHES: Good afternoon. I am a member of several environmental groups, but I don't have a prepared statement. I had no idea that I would be sitting up here.

I'm a 40-year resident of Long Island. I'm

a grandmother of three beautiful young grandchildren.

And I personally have just had solar panels installed on my roof.

And although solar and wind are not going to take the place of oil and gas immediately, I think the governor needs to propose more incentives for people to drive electric cars, to install solar panels when they can. Solar companies now have a deal with LIPA where you don't even have to buy the solar panels. You merely lease them. And the outlay of cash is minimal, if anything.

I know I live in Smithtown and I was encouraged because the building inspector told me that he is inspecting five solar systems a week in my township alone. So, if people have the incentive, they want the solar panels. They want the clean energy. If the governor can do anything to encourage that, it's better than building infrastructures for more gas and oil.

Thank you.

CHAIRMAN RHODES: Thank you very much.

Roger Clayman, followed by George Povall.

MR. CLAYMAN: My name is Roger Clayman. I

am the Executive Director of the Long Island Federation of Labor.

I want to thank you for developing this comprehensive plan and for listening to the voices of Long Islanders, who have had a first-hand experience on the front lines with climate and weather-related disasters, and know quite well firsthand the fragility of our energy infrastructure.

There is no clear consensus within our labor movement about the balance in our energy supply between fossil fuel and renewable energy sources. And the reason for this is our commitment to representing our members who are employed by utilities currently powered by traditional fuels.

We hope you will keep that issue of good jobs at the forefront of your thinking about our energy future -- the jobs associated with power plants, electrical and gas transmission, and the maintenance of these facilities.

The unionized jobs in this sector are the foundation of economic vitality in communities all across New York, including jobs in call centers, which are the lifeline between the public utilities and the

public that is served by them.

At the same time, we recognize that climate change is real. It affects our membership not only as citizens and consumers, but also as workers.

Our members were on the front lines with the devastation and cleanup from Hurricane Sandy. Many are still repairing their homes and recovering financially.

Our labor movement is fully committed to the green economy and the vast potential that lies before us to create new jobs and to protect the planet at the same time. We are engaged in every aspect of solar energy and solar electrical production at this point, and we look forward to working with these new ideas about wind.

We have become very impressed with the ideas put forth by Clinton Plummer, who spoke just before me, the tall guy, and we look forward to working to see that that's developed.

We urge you to stay on course with the targets for renewable energy in New York. Without clear goals and timetables, green jobs and the new economy are unlikely to be created.

We ask you to keep good jobs in mind throughout the discussion, and ensure that offshore wind

energy plays a major role in generating clean energy for New York in the years ahead.

Thank you.

CHAIRMAN RHODES: George Povall.

MR. POVALL: My name is George Povall. I am here today to speak as a citizen. I'm also forming my own group called Povall Hour Energy, which is designed to be outreach from the public seeking to become more involved in issues of energy independence and how we get our energy.

I want to thank you, Ms. Lee, Mr. Rhodes, Mr. Snyder, Jeanne, for being here today. I know it's not easy to sit here and listen to me and everybody else.

You have heard it all. I am not going to say it better than anybody else has. As a citizen, I would like to say that we need to make more commitments towards renewable energy.

We have a huge resource sitting offshore here, which really is just a waste not to be using it, and it's really a waste not to be putting more effort into developing it in a huge way. It's being done everywhere else in the world. It's proven.

I would really just like to ask for the governor to put a little bit more of a target or a little bit of oomph behind it, saying, let's have a vision. Let's say we can do more. Let's say, who has got the ideas? Bring them forward. Let's do more.

I think this would be very important to unleash the green energy economy that, really, everybody agrees is just waiting to be had here. We could build the whole east coast here for them to put them in New Jersey, Maryland.

There's lots of great plans. I think we need to have a clear and more concise, but very energetic and opportunistic, plan to take advantage of both the resource and the potential for what it could mean for this state economically.

If New York State leads with a clean energy vision, I really foresee it being an industry that would be here for a hundred years. So, I ask the governor:

Please, put forth a vision.

We went to the moon. We said in seven years that we can go to the moon. Why can't we say in 10 years we're going to have 50 percent? If we don't make it, if we made only 40 percent would that be terrible?

I don't think so.

So, let's have a grand plan. Let's make it big. If we don't make it, what's the worst that happens? We got 50 percent of renewable energy in 10 years, in 15 years? I don't know. I don't know what the answer is, but I do know that we do need to have that vision.

I would ask the governor to please put something forth like that. It doesn't cost anything.

Doesn't even cost political points. Please let him know that.

I appreciate all your time here today. Thank you very much.

CHAIRMAN RHODES: Thank you very much.

Billi Roberti, followed by Donovan Gordon.

MS. ROBERTI: I want to make sure I cover all my points, so I have them written down. Thank you for the opportunity to speak. My name is Billi Roberti and I am a homeowner from Huntington.

My partner and I completely renovated our small home in 2010 to Energy Star and LEED Silver standards. We weatherized the house and we installed both solar, photovoltaic, PV, and geothermal heat pump

1 systems.

Afterward, our total utility costs decreased 43 percent. Meanwhile, heating oil prices went up 44 percent. We are really glad we did that.

As a result of my experience, I was appointed to the Town of Huntington's renewable energy task force. This is the only one of its kind on Long Island. I'm also a member of the Long Island Geothermal Energy Organization, a non-profit association for promoting geothermal heat pumps.

For the record, I am against hydraulic fracturing for natural gas, but I will leave that issue for others to discuss. I also support PV systems, but there are many others who endorse that too.

So I am here to promote the use of geothermal heat pump systems, GHP. This technology will propel us to achieve many of the goals of the 2014 New York State Draft Energy Plan.

I will speak on two of the major goals:

Improving energy affordability and reducing

environmental impacts. My colleague, Donovan Gordon,

will talk also about GHP in his address.

Improving energy affordability. Keep New

York residential customer electric bills as a percentage of household income at or below the national average.

The best way to improve energy affordability is to

The best way to improve energy affordability is to increase efficiency.

The EPA says GHPs can reduce energy consumption up to 44 percent compared to air source heat pumps, and up to 72 percent compared to electric resistance heating, coupled with conventional air conditioning.

However, monthly electric bills are not the best measure for tracking energy affordability. Total energy bills should be the target, otherwise, there may be unintended consequences.

For instance, reducing or eliminating a fossil fuel bill by switching to GHP will actually increase the electric bill. The metric as defined would force the state to discourage GHPs, even though the total energy bill would be lower.

We eliminated our heating oil bill, but our electricity usage has increased. Although our overall energy cost decreased dramatically, it would look like the opposite if our electric bill was the only focus.

The metric as defined would force the state

to discourage GHPs, as well as other great options, such as plug-in electric vehicles.

For many homeowners, price variability over time is just as important as average price, and fossil fuel prices are much more variable than electricity.

Switching from fossil fuel GHPs, while increasing electric bill, decreases the overall energy bills and reduces the month-to-month variability.

Also, using monthly bills focuses attention on the short term, while this plan takes a long term view.

Increase energy efficiency resource deployment. GHPs are the best source to achieve this goal, as they rate 350 percent to 500 percent efficiency. No other HVAC system is as energy efficient.

If 20 percent of the 60,000 conventional systems, replaced yearly due to aging and failure, were retrofitted with 3-ton GHPs, the peak load reduction would be 240 megawatt over a 10-year period.

This would reduce the need for new power plants and reduce the demand and costs of the power provider.

Decrease electric system peak demand. GHPs are the only HVAC system that can reduce the peak demand in summer because they use 25 to 44 percent less electricity than conventional air conditioners.

Improve utilization of existing electrical infrastructure. GHPs are the only renewable energy system that shifts electricity usage away from the summer and into the less utilized winter.

This levels out demand throughout the year, helping make utility operations more efficient. And it decreases the cost of electricity since peak demand determines its everyday price.

Reducing environmental impacts associated with our energy system. Decrease greenhouse gas emissions in New York. GHPs are the technology to achieve this goal because they heat and cool with no emissions.

According to Oak Ridge National Laboratory, 100,000 average GHP installations reduce greenhouse gas emissions by almost 1.1 million metric tons of carbon during their average 20-year lifespans. GHPs eliminate the need for fossil fuel combustion to heat indoor spaces.

Since GHPs do not use fossil fuels, they do not pollute the air. They also eliminate the danger of flue fires, natural gas leaks, and CO poisoning due to poor venting, such as what happened recently at the Legal Seafood restaurant at the Walt Whitman shops on February 22, 2014.

If New York State is serious about this goal, GHP systems must have a prominent place in this energy plan.

Thank you.

1.8

CHAIRMAN RHODES: Thank you very much.

Donovan Gordon, followed by Adrienne Esposito.

MR. GORDON: Good afternoon. I'm Donovan Gordon. I live in North Bellmore. I am a LEED Green Associate, a sustainability and renewable energy consultant, and I currently advise Sherman Industry, Inc., one of the largest geothermal designers and installers on Long Island.

I'm also a member of the Long Island
Chapters for the United States Green Building Council
and the Geothermal Energy Organization.

I am here, as my previous, my friend Billi,

to promote the use of geothermal heat pump systems.

This technology will help New York State in achieving many of the goals of your 2014 Draft New York State

Energy Plan. It should be a major part of the plan.

As far as decreasing, one of your goals is to decrease the number of customers relying on oil, or for paying for heat, natural gas as well. So, I agree with the anti-fracking group.

Geothermal heat pump is the best solution to repress that because there's no fossil fuels. I will explain the technology as we go a little further. Also, it is the most efficient heating/cooling system on the market today.

As far as unleashing the power of private sector energy financing, this is an extremely critical issue, and I think geothermal heat pumps or geothermal industry in general should have parity with the solar and wind industry as far as investments and incentives go.

The ways to increase deployment of geothermal heat pump, the main thing is reducing the upfront cost. That was the major issue with solar initially, and that's been addressed. Now you can have

no money down. At least we certainly feel that geothermal heat pump should enjoy that as well.

Other things. As sales tax exemption, equipment and materials, solar PV and solar energy enjoyed. Specifying geothermal heat pumps as being eligible for the residential solar income tax credit. That legislation is actually in both houses and waiting to be approved. We certainly hope that's the case.

The extension of the income tax program for commercial buildings as well, and financing from the Green Bank for geothermal projects, both public and private. We certainly feel government building schools and large commercial entities should build geothermal, should have geothermal heating and cooling systems.

As far as increase cost effective distributed energy deployment, geothermal efficiencies will increase the cost effectiveness of energy deployment, whether by the grid or distributed power.

As mentioned earlier, geothermal and solar panel is the perfect marriage because it uses less energy.

As far as jobs, as we promote geothermal more aggressively, and there are more and more

installations, this will create local jobs for drilling and for excavation, for the HVAC industry, and also the surfacing of these units.

What I am going to do is jump to basically some definitions and understanding of geothermal as stated on the NYSERDA website.

Geothermal heat pump system. Geothermal pump systems, coupled with building HVAC system to the earth. Geothermal heat pump systems eliminate the need for boilers, cooling towers, etc. Meaning, no fossil fuels, no oil, no gas to heat the building.

The ground provides a nearly constant temperature source for BTUs for efficient heating and cooling.

So, the benefits, as stated by NYSERDA.

Benefits of geothermal. Low operating cost, no required exposed outdoor equipment, so it will last longer.

Levels seasonal electric demand. No onsite combustion.

This emits no carbon. Long life expectancy, upwards of 50 years. Low cost integrated water heating. This also provides heating, cooling and hot water. Simplicity.

Low maintenance because everything indoors or buried underneath. No supplemental heating required. And low

environmental impact.

Ralph.

Both EPA and Department of Energy, along with NYSERDA, says geothermal heating systems are the most cost effective and environmentally friendly way to heat and cool your home.

Thank you very much for time and attention.

CHAIRMAN RHODES: Thank you very much.

Adrienne Esposito, followed by Karin Lind

MS. ESPOSITO: Good evening. My name is

Adrienne Esposito. I'm the Executive Director of

Citizens Campaign for the Environment. There are five

state environmental organizations at five offices in New

York and one in Connecticut, and about 80- to 85,000

members.

We in New York State want a grass roots environmental organization. We have been reading and assessing and commenting on state energy plans for almost two decades now, and unfortunately, a lot of our comments haven't changed much since the last plan.

The one glaring thing about this plan is that it doesn't really contain numerical goals for renewables for wind, offshore wind, solar, geothermal,

battery storage.

What we would like to see this plan have is specific strong targets assigned with dollar values to the goals that it would state. It doesn't yet do that.

The draft plan doesn't provide the clear blueprint we are looking for with aggressive yet achievable goals for renewable energy. We know, regardless of the testimony you may have heard, we know that renewable energy can and should and needs to play a significant role in New York's energy plan.

For instance, the New York State Department of Energy's national renewable energy laboratory, not known for its whimsical commentary, has stated that New York State can be supplied 50 percent of its electricity needs from wind power. 50 percent of our electric needs could come from wind power, and yet, not one offshore wind farm exists in New York State. Not one.

The viable proposals that have been put forth, the Great Lakes and the Atlantic ocean, have died a slow painful death one by one. Why is that? Well, is it new technology? No. You don't need me to tell you that the first offshore wind farm on the globe was put forth by Denmark in 1991, 23 years ago.

Well, how is Europe doing? Well, I'm glad you asked. Europe, as you know, is the number one leader in offshore wind farm development. For instance, the United Kingdom, 3,681 megawatts; America, zero. Denmark, 1,271 megawatts; Belgium, 571 megawatts; America still zero. Germany, 520; the Netherlands, for goodness sakes, 240 megawatts of offshore wind energy.

And collectively in Europe there's 6,562 megawatts of offshore wind energy generated. America still zero.

What has Europe figured out that we haven't?
Why does this plan that has been put forward not assign
numerical values to offshore wind? That is doable, is
obviously working in Europe. It's not new technology.
It's not new. It works. We don't need pilot programs.
We need to get aggressive. We need to want to do it.
We are asking you to include it, assign a real value in
a substantive, meaningful way to New York's energy plan.

We have that collaborative, New York City,
NYPA, LIPA and the MTA is supposed to be working
together on south shore. They have moved at pre-global
warming glacial speed. That actually could be a clean
source of energy to replace Indian Point which should be

closed down.

Here on Long Island is the new one you have been hearing about, Deepwater Wind. It could generate 200, 300, 400, 500, 600 megawatts. We could share that with Rhode Island. Why is it not in the plan? Why is the plan silent on this? Please, don't be silent. We need you to speak up. We need it in writing.

Better move along. I have one minute for God sakes. Here we go. What the plan does particularly for Long Island is it causes the transition on Long Island from oil to natural gas. Substituting one fossil fuel for another fossil fuel is not good energy, nor public health policy.

The transition to natural gas is a backdoor embracement of hydrofracking. It's not going to work for New York State. Natural gas is not an energy bridge to the future, but rather, it is a highway to climate change, a warmer planet, contaminated water, and polluted air. One that we reject.

We want to say that here in Long Island,

Judith, John and Jared want to say welcome to ground

zero for climate change. We get it. We get it like

nobody else gets it, frankly, in New York State, because

you may think you got it when you watched the news and saw the devastation, but to be here and to experience it, and to work on the weekend volunteering to rip down people's homes, and take out every single thing they ever owned in life and put it on the curb waiting to get transported away, we know climate change is real. We know we need to make a transition from fossil fuels to cleaner, safe energy, and it's not a sound bite.

For us it's a reality. It's a reality that will only become real if we plan for it, and the plan needs to be more aggressive. It needs to embrace wind, solar, geothermal, battery storage, and assigned numerical values. That's how we will get there.

Thank you very much.

CHAIRMAN RHODES: Thank you.

MS. RALPH: Karin Lind Ralph. My name is Karin Lind Ralph, I've been a resident of Long Island all my life.

I care very much for what happens here and to New York State, which I happen to love also. I have grave concerns about fracking and effects on the environment. When even the CEO of Exxon doesn't want a fracking well near his home, one has got to question why

anybody would want fracking.

I guess also, you know, what do you do with these bi-products of fracking? Where does it go? Do you put it back in the earth? Do you keep poisoning the water? And what happens when we don't have anything to drink because of the fracking that's happening all over the country?

I just think that having fracking, which only benefits the companies that are doing it, it's really quite criminal to think that it only has to do with greed and money.

CHAIRMAN RHODES: Thank you very much.

Jane Fasullo, followed by Neal Lewis.

MS. FASULLO: Good afternoon. I'm glad you are here. I'm glad the governor has actually created an energy plan we can speak to. It has some really good components.

I'm sorry. My name is Jane Fasullo. I'm with the Sierra Club of Long Island. I'm also on the executive committee of the state division of the Sierra Club. And I can go into other things I do, but I'm specifically here today. That's what important.

The plan has some loopholes. I think

Adrienne said it best in stating that it does not have specific targets throughout the entire plan. Those are missing. It would be nice to see higher numbers, more numbers is what I meant to say, higher in number of numbers.

But I would like to speak to certain specific sections of the plan. One of them is to achieve the gas reduction goals that are set in the plan. The governor must implement specific steps involving extending and expanding the state's renewable energy and energy efficiency programs, which has not been spoken to here so far today.

It is unnecessary to help meet the greenhouse goals. Most important of these are electric efficiencies, building codes, and renewable energy itself.

Much has been said on renewable energy, but I would like to speak a little bit more on electrical efficiency and building codes. That does include the state commitment to 2020 to electric efficiency programs, which are currently set to expire in 2015. That's next year. This commitment must be coupled with target and dollar budgets to capture all cost effective

and energy efficiencies across all sectors.

In terms of building codes, codes and appliance standards must be updated more regularly, as well as aggressively enforced. Too long the area has suffered from lack of funding and political will to follow through on stated commitments.

As buildings account for the lion's share of engineer plans, strengthening codes and standards will both spur economic growth by saving their occupants money each year, as well as reducing emissions.

Finally, the plan must include more specific action items and metrics by which to measure the state's followthrough on these commitments.

The state can be leading the way by retrofitting the buildings it owns, making them more energy efficient, and by encouraging and aiding municipalities to do the same.

Here on Long Island, we have the wind plans which have done that. They would be wise to model after some of what has been accomplished here.

I then would like to speak about the transportation section. The transportation sector accounts for the largest portion of New York's

greenhouse gas emissions, and historically has also been the fastest growing contributor.

1.5

New York should continue investing in electric vehicles while also making the necessary regulatory changes at the PSC to remove barriers from electric vehicle adoption involving charging stations.

The state should also be electrifying its own vehicle fleet to reduce operating costs and air pollution, as well as reduces carbon emissions from the operation. And again, it should first assist and then require municipalities to do the same.

Diesel powered school buses, which we have thousands operating on Long Island, are prime candidates for electrification. Many of their routes are short, but technology has been demonstrated and they can be recharged at night at their depos when demand on the electric system is lowest, and therefore the cost as well.

I would next like to address the general topic of affordability. The plan in volume one, page 31, refers to the affordability of the plan itself as an overall picture, but it neglects to take into account that the affordability of electricity for New York

people and businesses is not just about the cost of our electric or our fuel that we have to pay for. It's about the cost of our health.

We need to couple the cost of health with the cost of electricity when we talk about the cost of what we are doing with the energy plan. It is foolish to think that people don't have to pay higher premiums for their health insurance or that the government isn't subsidizing in some way, or that business itself isn't subsidizing the cost of health.

We all pay. You cannot look at the cost of energy without looking at the cost to the human being in health.

Thank you.

CHAIRMAN RHODES: Thank you very much.

Neal Lewis, followed by John Burke.

MR. LEWIS: Good afternoon. My name is Neal Lewis, I'm the Executive Director of Sustainability Institute of Malloy College.

I certainly speak in favor of a number of the points that have been made. I'm going to just touch upon them briefly, but my main point today is to recommend action regarding the issue of carbon monoxide

hazards.

However, I do want to point out that
Sustainability Institute of Malloy College has put on
viewings of the Gasland movie twice, and are very
supportive of effort of the groups that are here calling
for a ban on fracking. And our policy suggestion to
this plan is perhaps that it should encourage a rule
that says you have to at least have seen that film
before you can vote on anything regarding the issue.

I also generally support the points that have been made that this is more of a vision than a plan, and it needs more metrics, more specific numbers, it's lacking in that area. It's great to see geothermal organizations represented here today, and has made the points about their lack of inclusion in past plans, and how there should be better equity in support of their industries, incentives and renewables.

And the issue of municipalities. There's an old executive order. How about a report on updating precisely what was in the executive order, executive order 111, long overdue. No reason why it hasn't ever reported. I have asked about it for years, by the way.

With that said, last week there was a tragic

death of a man by the name of Stephen Nelson, who I understand, but we will wait to see the specifics in the report, so I will put it out as a question. Was he sick for several days before he passed away?

I believe there are thousands of people on Long Island living in homes and going to work every day under circumstances that make them sick. And that is essentially that they are exposed to low levels of carbon monoxide.

And in the case where carbon monoxide kills, clearly it has gotten to that higher level, and the question is whether or not your monitor is in place, whether it's not too old, whether it has not been used before and would therefore need to be replaced, and that it's either hardwired or has battery backup. If all those things are in place, hopefully it will save your life.

We certainly support the effort to extend the current law from residential and places where people sleep to commercial, but that does not go far enough, and it's an energy issue that should be addressed in the energy plan.

The first point is that it should be a

requirement for all buildings to have digital monitor readouts. And if you work in a building, you have a right to know that the carbon monoxide that's in your workplace, this is a right to know issue, that it is at a safe level, or it should really be zero.

So, you should be able to walk up to a monitor, put your finger on the button, and it will give you the readout.

We believe strongly that if you do that what you are going to discover is that many combustion systems have a low level of exposure of carbon monoxide being produced as a result of the fact that they are not working efficiently, and may not be regularly cleaned, and a number of other factors. That's how this ties into being an energy issue, because this is about promoting energy efficiency.

We need to be promoting home energy audits. We need to be promoting carbon monoxide tests. As I said, monitors that will pick up these lower levels of exposure that are causing illness, and the illness can cover a range of things.

I would point out the experience of one mother who came to us after having had an energy audit

done as a result of the advocacy to make her aware of that state program, which is called Green Jobs Green New York program. She got the home energy audit done and she had a carbon monoxide leak in her house that never triggered her alarm.

Her son for years suffered from severe migraines, and they could not figure out anything to do about his problem other than to darken his bedroom.

This is an energy issue and it should be featured in the energy plan.

I found only one mention of the subject in the plan so far. I apologize if there's more in there that I have not been able to find, but certainly it is not an adequate addressment of the issue.

I would like to see NYSERDA produce an annual report on what we know about carbon monoxide detection from the home energy audits that were done. We have been asking for this status.

Similarly, I think fire marshals should provide us with the data on the broad range of scope of this problem. People don't realize that this is in the thousands of homes that are having problems because they do trigger these monitors.

Personal monitors should be provided to EMT people that come to a place and they don't know whether or not there is a gas problem, as was the case with the Legal Seafood incident.

Repair personnel. When you get your car tuned up, they take it for a run around the block before they give it back to you. Any repair person that comes into a home, or comes into a business with a combustion, if you work on the combustion system you must do a carbon monoxide test before you leave the premises. That should be the rule.

We have ten recommendations, and we really call on the State of New York to really lead the nation on this issue. 170 die every year from carbon monoxide that is not related to automobiles.

Thank you.

CHAIRMAN RHODES: Thank you very much.

John Burke, followed by C. Carre.

MR. BURKE: Good afternoon. I am John Burke. I'm not a public speaker. I didn't write it down, but I will and I will send it in.

I have been working in renewable energy and solar for over 30 years, since 3 Mile Island. We did

work to help stop the Shoreham nuclear plant on Long
Island with the help of Governor Cuomo. Mario, that is.

And since 3 Mile Island, we have been involved with solar energy education and helping people learn about solar, and how to make their own solar panels, as well as doing installations including down at Jones Beach, at the West End One, which is now the Theodore Roosevelt Nature Center, and they installed a so-called geothermal, although it's actually a ground source heat pump, since we don't have volcanos on Long Island.

Ground source heat pump uses a lot of electricity. That's why we install photovoltaics on the building at West End One.

Speaking of fossil fuel and the fossil fuel addiction that we all suffer from, and we are all in denial of, I would like to point out that fracking, tar sands, oil, natural gas, and any fossil fuel burning, produces carbon monoxide as well as carbon dioxide.

As the tundra goes through the climate crisis and the global overheating, it releases the methane that's been trapped underground for millennium or millennia.

I want to point out that all of us here have the ability to take a stand for the future, because anything we do today is going to be felt by our grandchildren and their grandchildren.

Do we have three minutes remaining? Do we have ten years remaining? When will we get New York

State to ban fracking and to ban tar sand oil being shipped through New York State on rail or down the Hudson River? Will we ban the LNG port off Long Beach?

I have one question for Andrew and that is: What would Mario do? Thank you.

CHAIRMAN RHODES: Thank you very much.

C. Carre, followed by Anne Mayer.

I am not sure if C. Carre is here from Food and Water. So, let's go on to Anne Mayer, followed by Peter Gollon.

MS. MAYER: I am a member of Food and Water Watch and many, many other organizations, Healthy Planet. All you can do is look back at the '70s when we were a lot younger and sitting on gas lines and it's just amazing how little has happened between now and then.

The unfortunate thing is we don't have

another 30 years to fool around with what's happening on a global scale. You look at the New York Times bestseller list, and there's a book called Six Extensions. It's not about politics. It's not about money. It's about survival of the planet.

It's about you and your families as well, because we all drink the same water, we breathe the same air, we eat the same food. And we look out west and the water crisis that is happening and here we are taking millions of gallons of water and poisoning it?

I don't know if you guys had the good fortune of seeing the expo at the Museum of Natural History on water. And one percent of potable water is drinkable. Even you have to question that with all the poisoning and pollution that's going on.

I would like to speak to the gentleman who spoke about Germany as a poor example of solar. You can't compare Germany to New York. We get a lot of sun. And it should be a mandate for every flat building on Long Island, in New York State, should have solar energy.

Charging station for cars. There's no excuse at this point. The motto should be first do no

harm. We don't want a level playing field with fossil fuels because fossil fuels in terms of health, super cleanups.

1.4

I have an article here that -- and let me talk about nuclear. Just look at Fukushima. They are not telling the whole thing about that. That issue alone is threatening the life on this planet.

An article out of the New York Times -- by
the way, I am a mariner. I graduated from SUNY Maritime
College, and also I'm an electrical engineer. The
article is in February, bakken crude rolling through
Albany. This crude is not your average crude. The
article points out 400,000 barrels a day heads to the
east coast. It's highly flammable and very dangerous.
They are not equipped to clean it up.

Just go to Riverkeeper website. They have a little information on it. Tank, 600 feet ocean line auto tank that ran aground. If it didn't have a double hull, which is something that I learned about, American flag bearing ships have to have these things, all that work that Pete Seeger did would be in one fell swoop just undone.

So, it's just unbelievable. Every day I

read the paper and would advise you to all read the New York Times. There's great articles in there. For example, they said that it does not pay to change over bus fleets to gas buses, because when they look at the whole fleet of gas policies, extracting it to the point where it reaches to the bus, more methane is released that doesn't justify the switch from diesel buses to gas buses.

These are the kind of articles that you will find in the New York Times, and we have to take a stand. And the time is running out. I really wonder if there will be a planet, and if there will be, it will be very, very, very few because people in the Long Island, LaGuardia airport, we will be underwater.

Thank you.

CHAIRMAN RHODES: Thank you very much.

Peter Gollon, followed by Julie Sullivan.

MR. GOLLON: Good afternoon. I would like to thank the State Energy Planning Board for the opportunity to comment on the Draft State Energy Plan.

My name is Peter Gollon. I have been a resident of Huntington, just a few miles north of here, for the last 35 years. I'm also energy chair of the

Long Island Sierra Club.

National Sierra Club is the nation's oldest and largest grass roots environmental organization, over 35,000 here in the state.

We are experiencing a climate crisis.

Science is clear, indisputable. Threats to our world's environment. By extension all of us, me and you, the living, are caused by global climate change. A manmade threat caused by increased use of carbon based fossil fuels. Carbon dioxide releases greenhouse gases into the atmosphere.

And it's important to emphasize the other gases, because the climate plan talks mostly of carbon dioxide, but other gases are also causing greenhouse effect, more potent on the molecular basis. So, it has to be in terms of carbon dioxide equivalent.

We understand and see full well the beginnings of a changed climate, higher average temperatures in winter and summer, leading to the spread of tropical diseases and invasive agricultural pests further north. Higher peak temperatures in the summer, and extensive droughts, couple with more intense storms.

Oh, yes. Stronger, more frequent hurricanes

and tropical storms. Super storms Irene and Sandy are examples of climate disruption that all of Long Islanders understand.

Governor Cuomo has promised that New York will be a leader in addressing climate change. New York can and must follow through on this promise to transition to a renewable energy future. To protect our families from the threat of worsening climate disruption.

We must lay out a specific path to immediately begin moving away from totally unsustainable fuels of the past, like coal, gas and nuclear, and toward cleaner global energy solutions of the future.

This must be done because our children and grandchildren deserve as habitable a planet as we do.

This energy plan must include mandates for enforceable interim steps, emphasis enforceable, emphasis interim, and targets that would meet the state's goals in reducing carbon pollution by 80 percent by 2015, the goal originally established in 2009 under then Governor Paterson.

So, tell me. How far along is the state now toward that goal? Or how far behind? Without any

meaningful checkpoints along the way between now and 2050, we will have no meaningful way to see if we are on track to meet that goal.

We need to establish intermediate goals and not be surprised to find in the allotted time we are only halfway to the goal. And we suggest 14 percent target by 2018, compared to the 2011 levels, and 20 percent by 2021, to ensure the state is on the appropriate path to comply with the efficiency goals.

The goals that relate to electric utilities must be mandatory and enforceable, both as applied to the investor owned utilities and for LIPA, now PSEG Long Island. That was when the public had more input and the board had more control over power purchases than they will next year under the direction of PSEG Long Island.

The governor deserves high praise for the New York Sun initiative, which is resulting in enough solar power being installed, rather it's just a part of the mix. New York is now fifth in the nation in terms of solar jobs.

As Long Islanders, we are keenly aware of the geography that threaten us through the climate disruption. Fortunately, our geography also presents us

with one major solution: Offshore wind. We have abundant offshore wind resources of larger capacity factors and peak production to better match the afternoon and evening wind.

There are two projects that are being discussed today, one 130 miles off Montauk, and received from the federal government and is ready to sign a power purchase agreement today.

The other is off the Rockaways and it is being pursued at an unknown rate of speed by NYPA. We must proceed expeditiously with both projects. First, so we get the benefits of cleanly produced power at a stable price. Second, we know about price stability just having watched people's electric bills go up because gas went up in the last two months.

And secondly, for the development and expertise for the jobs on Long Island, just as it is today in Europe.

Now it's time for LIPA PSEG to use this renewable energy procurement process to invest in offshore wind. And solar energy and energy efficiency are important, but we must commit more to wind energy to get renewable energy to scale.

Only by continuos focus and developing resources all New Yorkers use will become commonplace and part of the mix in this country as they have been in Europe.

Sierra Club calls on the governor to permit land based wind power upstate and moving forward on offshore wind this year off of Long Island's shores.

Finally, the energy plan must be followed by specific steps that are to be taken by all entities throughout the state. I refer you to the state's 2010 climate action plan, and the plan just released before the end of Mayor Bloomberg's term, New York City's Pathways to Reduction, that have detail required in order to get from here to there.

Thank you.

CHAIRMAN RHODES: Thank you.

Julie Sullivan, followed by Bill Feldmann.

MS. SULLIVAN: Good afternoon. My name is Julie Sullivan and I am one of half a million members nationwide of Food and Water Watch.

New York State's Energy Plan is not a plan.

It doesn't design clean energy, although it implies that natural gas is a component of clean energy. Just for

the record, it's not.

It doesn't recognize the contradiction between reducing fossil fuels, but then facilitating their transportation and export. It doesn't address a ban on fracking or closing nuclear facilities in New York State.

A plan must be specific with regard to goals, targets, timelines, and it must quantify costs. It should express a vision, such as targeting the reduction of all fossil fuels, replacing them by energy efficiency and renewable resources. You have to think out of the box, envision something like solar panels in parking lots to energize their shopping centers, their schools, their local communities, while charging vehicles.

How does this plan stack up with reality?

In actuality, New York State is becoming an export facilitator ruled and controlled by businesses too big to fail.

How is this? First, New York is building gas pipelines and plans to build a terminal to import and to export LNG as today's terminals are all becoming bidirectional.

Second, New York is improving statewide rail and Hudson River barges to accommodate transport of crude oil from the bakken shale to foreign markets.

New York State shouldn't be the stepping stone for the rush to exploit resources in states that are in lockstep with the gas and oil industry. Instead, we need to focus on sustainable energy sources that improve the public health and environment.

Wherever states weaken regulations to accommodate industry, people in communities suffer from toxic leaks, emissions, explosions and more.

While many of the plan's initiatives, like 80 percent emission reduction by 2050, may sound good for New York's energy future, methane is not mentioned.

Instead of planning to reduce our dependence on natural gas, initiative 9A, B and C is clearly designed to continue fueling our addiction to this harmful methane leaking fuel.

You can't have it both ways. To reduce potent methane emissions, New York must ban fracking, just refuse to partner with other states to strengthen their fossil fuel infrastructure and delivery systems, and refuse to identify foreign customer demand for more

gas and liquid fuels, all of which this plan proposes.

It talks about keeping prices down, but during the past year natural gas prices nearly tripled, spiking at nearly 8 dollars a thousand cubic feet last month, and will further rise, if exported.

So, consider our comment. And help us help you rethink a plan for the future of New York's energy. Thank you.

I would like to make another statement on my own behalf. I'm out of time. I will use a minute.

I moved to New York, to Long Island 35 years ago, and it was right after the Carter administration.

And what we had done is purchased a house in Long Island that is active and passive solar. 35 years ago it was. It continues to operate a 500 square foot segment of solar panels. There's thermal solar, which is mentioned in the plan, by the way. So, it is still considering that.

It's been operating continuously. We have no gas, oil or other fossil fuel generating energy heat or any other source of energy in the house. Our bills have averaged way under \$2,000 a month. We have a 2,000 square foot house in the middle of Long Island.

A year. It's \$2,000 a year without any fossil fuel, direct usage of fossil fuel.

Now, after the Carter administration we had the Reagan administration. In the White House, Carter put in solar collectors, which Ronald Reagan, the first action he did was take them down.

Now, we could have over 35 years been advancing all the renewable resources, energy resources during that time, and be the world's leader, but we are not. We didn't do that. We followed Ronald Reagan and all his people from industry, and this is where we are today with having to start all over again.

Thank you.

CHAIRMAN RHODES: Bill Feldmann, followed by David Alicea.

MR. FELDMANN: Good afternoon. My name is William Feldmann. I am the COO of Empire Clean Energy Supply, also known as ECES, which is located in Bohemia, New York, a stone's throw from Long Island's MacArthur airport.

We are a renewable energy equipment distributor specializing in solar PV, solar thermal, and geothermal heat pumps. We are the New York distributor

for the patented GeoColumn, a residential ground source heat pump heating and cooling system that uses a truly innovative hybrid design.

I am here to testify about the invaluable role geothermal heat pumps can play in New York's energy future. As compared to traditional heating and cooling systems, geothermal heat pumps are safer. They eliminate combustion in the home, which eliminates the need for carbon dioxide detectors.

It eliminates sickness and deaths caused by carbon monoxide poisoning. It is less expensive.

Lifecycle cost analysis shows a low cost over 20 years when considering the cost of installing and operating the equipment.

It utilizes the existing electric distribution system, so it eliminates the need and costs associated with building new natural gas distribution infrastructure.

It is better at reducing greenhouse gas emissions. According to the EPA, geothermal heat pumps can reduce energy consumption and corresponding emissions up to 44 percent air source heat pump, and up to 72 percent when compared with electric resistance

heating and with standard air conditioning equipment.

When you combine the system with photovoltaics, or PV, all emissions, including greenhouse gases, are completely eliminated. In my opinion, the main barrier to widespread adoption is the lack of education in the financial sector about these systems.

Once the financial community understands, and more importantly, once they trust the data, all New Yorkers will benefit from a safer, less expensive, cleaner, heating and cooling infrastructure. I ask you to take this to heart in the planning of New York's energy future.

In summary, geothermal heat pumps are safer, less expensive, and cleaner than the existing infrastructure and a lack of understanding by the financial sector is a major barrier preventing the widespread adoption of this technology.

Please do everything in your power to change this. Thank you.

CHAIRMAN RHODES: Thank you very much.

David Alicea, followed by Barnaby Friedman.

MR. ALICEA: Thank you. My name is David

Alicea and I am the local call organizer for the Sierra Club. I am here on behalf of the millions of members we have and the thousands of supporters we have here on Long Island.

We want to thank all the agencies and staff that helped compile the New York Energy Plan and for hearing us speak today.

In late 2012, after the devastation of super storm Sandy, Governor Cuomo made it clear climate change is real and we have to act. Since then, the governor has made a strong commitment to solar with New York Sun. And this plan, and its goal of reducing greenhouse gas emissions 80 percent by 2050, shows the governor understands climate change is a serious issue.

Unfortunately, the plan has more questions than answers when it comes to how we get to that 2050 goal. Our families deserve a stronger plan that will drive investments in renewable energy as wind power, while moving away from dirty fossil fuels.

Investments in clean renewable energy like offshore wind here on Long Island can clean up our air and lower energy costs. Specifically, we believe that the plan should have enforceable interim targets for

reducing carbon pollution.

While the governor's New York Sun initiative is a good start, if New York is serious about reducing carbon pollution, we need a full plan that rejects further investments in fossil fuels, and prioritizes renewable energy.

We must commit to expanding, increasing our renewable energy targets to a goal of 50 percent by 2025, as well in New York energy efficiency programs past 2015.

The energy plan should also do more to explore the opportunity we have to build a new clean energy economy. One of Long Island's most plentiful resources, wind energy, is barely mentioned in this plan.

If Governor Cuomo wants to be a climate leader he must make a significant commitment to wind energy. With the projects proposed right now, this is the year for Governor Cuomo to act.

Governor Cuomo can purchase offshore wind power from projects off Montauk, move forward with the project proposed by the New York Power Authority off the Rockaways, and make Long Island a wind energy leader.

Just a few months ago, Sierra Club, along with the New York Public Interest Research Group, delivered over 13,000 signatures to the governor asking him to make a commitment on wind energy. Polling shows more than 70 percent of Long Islanders believe we need to prioritize offshore wind energy.

After seeing the firsthand impact of climate disruption, Long Islanders get it. We need to move off outdated fossil fuels.

Long Island is also excited by the opportunity for economic growth of offshore wind. New York has a manufacturing base, an educated workforce and a port infrastructure that can become home to the American offshore wind industry.

Long Island can become home to a strong offshore wind industry and fuel a wave of investment and economic growth, much like what we saw when Long Island was home to a strong aerospace industry.

But New York is lagging behind. Governors in Massachusetts and Maryland are already moving forward with an energy plan. If Governor Cuomo is serious about bringing jobs and economic investment to Long Island, he can't wait any longer. Long Island is ready for wind.

All we need is the governor's leadership.

Once again, we're glad to see a goal of 80 percent reduction by 2050, but action on climate change can't wait until then. Super storm Sandy showed us all. Our communities are at risk now. Will the next generation be able to enjoy Long Island's famed beaches or the boardwalk at Long Beach? Will families who have lived for generations on the south shore be forced to move?

We need Governor Cuomo and this energy plan to make sure we are protecting our communities, make a strong commitment on renewable energy, and a real plan that explains how we can get there.

Thank you once again for your time. I hope you take my statements and the others made by friends that have spoken and will be speaking, and use those to revisit this energy plan to help New York become a real climate leader.

Thank you.

CHAIRMAN RHODES: Thank you very much.

Barnaby Friedman, followed by Gordon Canary.

MR. FRIEDMAN: My name is Barnaby Friedman, and I'm the Program Manager for Renewable Energy Long

Island.

First, I would like to thank the New York
State Energy Planning Board for allowing this public
input on their energy plan.

not-for-profit whose mission is to educate and promote the use of clean sustainable energy use and generation on Long Island.

Our position on the 2014 New York State

Energy Plan is that it needs to be more aggressive in

its support of investment in renewable energy. If New

York follows its current path, it will not achieve its

goal of an 80 percent reduction in greenhouse gases by

2050.

New York State needs to realize that the only way to reach this goal is to stop spending money on fossil fuel based energy. Instead, New York needs to commit its resources towards the expanded, land based and offshore wind, which together can provide a large percentage of the energy you require.

Let's take advantage of the remarkable wind resource we have blowing just offshore. In addition to wind, we need to put more money into solar and

geothermal energy production.

If this plan commits more resources to renewable energy, we will have the added benefit of creating an entirely new sector of jobs, but that is not enough.

In addition to increasing funding for renewable energy, this plan needs to include expanding both home and business efficiency programs, so that while we expand our renewable energy production, we strengthen the amount of electricity we use.

Let's use this opportunity to build this plan into a model that the rest of the country can follow as a roadmap to combat climate change.

Thank you.

CHAIRMAN RHODES: Thank you very much.

Gordon Canary, followed by Lynn Meyer.

MR. CANARY: Good afternoon, my name is

Gordon Canary. I'm the District Office Director for New

York State Senator Phil Boyle. Unfortunately, Senator

Boyle has been called into session in Albany, and he has

asked me to represent him here today. I will be reading

the senator's comments to the planning board for the

record.

I would like to thank the New York Energy Planning Board for hosting today's important hearing. Thank you for allowing my District Office Director Gordon Canary to attend today's event as my representative.

I wish I could be there personally to discuss renewable energy issues here on Long Island and throughout our state, but I was called to Albany today for our legislative session.

I read the 2014 New York Energy Plan with great disappointment in that more emphasis was not placed on renewable energy sources. It seems that some officials in Albany are more interested in talking about renewables than actually acting to make New York State a leader in this area.

Well, the time for talk is over. One of the areas of renewable energy that we as Long Islanders can rally behind is offshore wind. While upstate New York reaps the benefits of cheaper hydropower, we actually play to our strength here on Long Island. Yes, we live on an island. It is a region where average wind speeds are higher than in many other areas of our state and nation.

Offshore wind energy has had some somewhat controversial history here on Long Island with some residents concerned that massive windmills will spoil the view from our beloved beaches.

I would note that some of the new proposals for wind farms now being considered for our coastlines would barely be visible from our beaches, if at all.

As we speak, there are dozens of offshore wind farms in Europe. There are a dozen more planned in the coming years. Why are there none in New York? Why is there not even one anywhere in the United States?

I want to see our state lead the way for offshore wind in this country as we strive to lead the nation in all renewable energy sources.

Offshore wind will provide clean renewable energy, which will reduce air pollution and greenhouse gases. Equally important, offshore wind will provide jobs for New Yorkers and lots of them.

As we meet in Albany to negotiate the 2014-15 New York State budget, I call on the governor and the state legislative leaders to put our money where our mouths are. It is time to stop talking and start acting to increase renewable energy alternatives here in

the Empire State, and for New York to lead the way on offshore wind energy.

Thank you for taking my comments into consideration.

CHAIRMAN RHODES: Thank you very much.

Lynn Meyer, followed by Donovan Gordon. At that point I propose a break.

MS. MEYER: I'm Lynn Meyer. I am here today as a lifelong New York resident, also as a board member of White Roof Project. We are a non-profit group operating mostly in Manhattan. We raise money to coat roofs that are currently black tar with white, highly reflective coating, which enables them to save up to 40 percent of energy in the summer, as well as reducing urban heat island effect.

We propose that New York State tighten its building codes to include a roofing provision, such as New York City currently does, which states that buildings who are renovating their roofs must use a white coating in the case of black tar coated flat roofs.

New York State could also require that homeowners with a typical steeped roof use roofing

shingles approved by Energy Star or LEED, which would save a great deal in the summer energy costs.

As a New York resident, I also agree with everything that has been said before about banning fracking in New York State. I would like to see New York State become a leader in wind and solar energy so that I can leave a better state for my children and grandchildren.

Thank you.

CHAIRMAN RHODES: Thank you very much.

Donovan Gordon.

(There was no response.)

John Rhyner.

MR. RHYNER: Good afternoon. My name is John Rhyner. I am a practicing geologist and environmental consultant here working on Long Island.

Like many people have talked about, I would like to talk in favor of the geothermal heat pump systems, along with the other renewables in that category.

I've been working in the industry for about 15 years now. Currently I am also a board member of the Long Island Geothermal Energy Organization. I'm going

to try not to trip through my notes here.

I had to delete a lot of it, espousing on the technology. We are not talking about the hot rock geology. We do not have magnum around here.

But, fortunately, wherever you can get a drill rig you can use geothermal. It's viable everywhere in the state. Long Island is ideal territory. I believe that it deserves better attention from the state than it has received in the past due to its many benefits.

First, it was fully endorsed by the federal government, as has been said. Both the Department of Energy and EPA have fully endorsed, as has the GSA, largest landlord in the country, as well as the numerous federal bases that are using geothermal systems on a large scale. So, certainly it's scaleable technology as well as possible for individual residential houses.

I believe it's deserving parity with the other renewables. And you may know that some of the surrounding states -- Massachusetts, New Hampshire, Maryland -- they all have designated geothermal as renewable akin to solar and wind, or as providing a useful thermal energy, so they can incorporate these

definitions into legislation. And that has allowed the state utilities in these -- electric utilities in the states to be able to use geothermal systems as they support and finance and incentivize towards their renewable portfolio standards.

And Vermont and many other states are moving in that direction. So, they are falling like a house of cards, and New York is right in line with all the New England states.

So, I would certainly ask you to consider that and be prepared for it because it's coming. It's been a quiet industry. We are mobilizing with the LI Geo, with New York Geo, New England Geo, NESPA, Maryland Geo. We are finally developing a voice for ourselves.

It's been a quiet technology up until now.

It's buried in the ground. It's not on a house. It's not on a windmill. But it's coming. So, it has tremendous benefits. There has been talk of shedding the summer load, diverting the use of the electrical grid to the winter, and it fully can replace fossil fuel for heating.

One of the governor's own efforts, the Clean Communities initiative, the Greater Long Island Clean

Communities report acknowledged geothermal heat pumps as a good goal to retrofit HVAC systems, particularly where gas is not available, which is a very huge building stock on Long Island, and the houses are just using oil based fossil fuel for heating. They don't have access to gas. So, one of the governor's own initiatives has promoted that.

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What else? What else can I say? So, my recommendations or actions, suggested actions would be certainly geothermal should be included in the energy plan, particularly in the Green Bank program, because it does have a higher first cost and financing needs to be behind this.

NYSERDA should issue RFPs to engage flex tex contractors who are specifically experienced in conducting geothermal feasibility studies, in addition to the other more conventional HVAC systems that are looked at. People should have the option, if they want, to look at geothermal as an option and instead of a fossil fuel based heating system.

Geothermal can be mandated as part of new construction and it is scaleable. Europe is prevalent with district heating and cooling systems. I've done

some feasibility studies here in the state, but there's 1 2 been no takers. So, it certainly is scaleable. I thank you for your time. 3 CHAIRMAN RHODES: Thank you very much. 4 5 We will now take a break. I hope to keep it at five minutes. 6 7 (Recess taken.) CHAIRMAN RHODES: I am going to call the 8 break and we will resume. 9 Mary Helen Crump, followed by Rav Freidel. 10 MS. CRUMP: Thank you for coming out and 11 hearing our thoughts. It means a great deal. We really 12 have some deep thinkers here. 13 14 I have lived all my life on Long Island's 15 south shore in Lindenhurst. We took the biggest hit from hurricane Sandy, located east of the eye. 16 17 experienced the highest water level of the storm at 14.58 feet, slightly higher than the infamous Battery 18 19 Park flood. 20 The 9.34 foot storm surge came despite barrier islands that remained intact. In our case, 21

winds from the east end of Great South Bay and three

successive high tides flooded Lindenhurst up to and cut

22

23

off Montauk State Highway. This time it was
Lindenhurst. Next time it will be another south shore
community cleaning up after living along hurricane
alley.

As oceans continue to heat up with increasing levels of greenhouse gases, the hurricane Sandys may be more the storms of the decade than of the century for us. Climate change is real.

Therefore, I believe there is new urgency in meeting the state's goal of reducing carbon pollution 80 percent by 2050. To meet that goal, I am proposing five additions and/or clarifications to the energy plan.

First, concerning hydraulic fracturing, we know of the unacceptable extent of environmental damage by fracking. Drillers would like the state to open the southern tier Marcellus shale deposits.

I view fracking as not so much a plan, but as a failure to plan, to mitigate greenhouse gases. It does not belong in the energy plan. I believe we need a 10 year moratorium on hydraulic fracturing of natural gas in the state to put off, and hopefully fully deter mining, when and until the science is fully known and consequences deemed acceptable.

Two, concerning the principal of environmental justice, it appears in volume 2, chapter 2, I believe real justice would advocate not only what you call meaningful involvement, but what I could call self determination. I have in mind the southern tier's distress over the potential to opening it to fracking.

As an opponent to fracking, I want to see specific environmental justice and self determination rights written into this plan.

Three, I propose to meet the 80 percent carbon reduction goal with a carbon tax. Carbon taxing is based on the relative pollution of fossil fuels. For example, a carbon tax program was instituted in Vancouver, British Columbia, which is its largest city, from 2008 to 2012, on sales of all carbon products that excluded air travel.

Vancouver succeeded in lowering fossil fuel purchases over 17 percent, while the rest of Canada rose one and a half percent. Greenhouse gas emissions dropped in Canada from 2008 to 2011. British Columbia's greenhouse emissions dropped nearly 9 percent more than all of Canada.

A carbon tax deserves to appear in the

energy plan. My source is noted in my thinkprogress.org transcript.

Point four, I propose to meet the 80 percent carbon reduction goal with offshore wind farms. For example, an offshore wind farm is nearing reality in Nantucket Sound, and would be the first American offshore farm. The Cape Wind project, if built, would include 130 wind turbines, providing 75 percent of Cape Cod, Nantucket and Martha's Vineyard's needs. Why not us? Offshore wind farms could be a reality off Long Island and should be pursued in the energy plan.

And finally, I propose to meet the 80 percent carbon reduction goal with a solar and PV consumer program that really works. I am now in the lengthy application process with PSEG, but wonder when will I see my own power generation? To wit, I know someone whose panels were fully installed in September of last year, but as of late February, five months later, had yet to use them because PSEG has not installed the two-way meter.

Imagine that. Wink. I suspect that the current funding is just inadequate to meet the demand.

In summary, I would like to see planning to

meet the 80 percent carbon reduction goal through conservation with a carbon tax and with more renewable funding for offshore wind farms and solar. I also need to see the southern tier Marcellus shale mining entirely off the table.

Thank you.

CHAIRMAN RHODES: Thank you very much.

Rav Freidel, followed by Robert Frankum.

MR. FREIDEL: My name is Rav Freidel. I represent the Concerned Citizens of Montauk, an environmental organization founded in 1970. We have 1,000 members. Some are in the fishing industry. Montauk has the largest commercial fishing fleet in the State of New York.

The New York State Draft Energy Plan isn't clean enough for Concerned Citizens of Montauk. It is clean enough if you were Liberty Gas, a Cayman Island corporation, which has twice been vetoed by New Jersey Governor Chris Christie, and is now trying to industrialize the New York side with LNG Port Ambrose.

It's clean enough if you think fracking and burning shale gas won't release an even more potent greenhouse gas, methane, which will melt the polar ice

faster, rise the sea levels faster, turn the ocean acid and kill off the coral reefs and food chain even after.

Think it's clean enough if you are one of the politicians or big environmental organizations that's taken money from Liberty Gas and has remained silent on the plan to industrialize the ocean and export LNG.

Trace Duran, former head of the East Camden
Town Republican party, introduces me as his land
preservationist. I've been at it since 1982. I can
tell you that all along the way for every land parcel,
everybody told CCOM to forget it. You can't save you
can't save the sanctuary. You can't save Caroga lake.
You can't save the camp here. You can't save Amsterdam
beach. Folks, they are all saved.

Today, more than 70 percent of Montauk is preserved as parkland for present and future generations thanks to CCOM. CCOM has the can do spirit. New Yorkers have the can do spirit. America has the can do spirit.

Somebody said before, and I'll repeat it.

When I was a boy, the Russians sent a man in space.

John F. Kennedy told us we're not a rocket. We are

exploding up on the launching pads. In 10 years we will land a man on the moon. We did the impossible. Good old American ingenuity and know how put a man on the moon in 10 years.

You bet I believe in the can do spirit of

America. It's in that spirit that I urge you to throw

out this draft energy plan and start with a clean sheet

of paper. Bring us a plan where the only energy

generation allowed in the ocean is clean renewable

energy, like wind, solar and geothermal.

Bring us a plan where they will have no BP-type oil spills, no LNG explosions or other deadly industrial pollution. Bring us a plan that protects the fishing industry, not the fracking industry.

Bring us a plan that calls fracking what it is, not a bridge fuel but another dirty carbon based fuel. We might as well be burning coal if we burn shale gas.

Bring us a plan that prohibits New York from both fracking and importing fracked shale gas, or any electricity produced from fracking. No, it's not okay for other states to pollute their air and water and cook the life out of the planet to provide energy.

Bring us a plan that puts solar panels on every rooftop in New York, and leads New York, the nation, and the world to a zero carbon economy. And most importantly, bring us a plan that takes ten years to do it.

In the 1970s, Walter Cronkite was telling us we have got an energy crisis. We are in the 2014s.

Come on. We can't wait until 2050.

I urge you to think of climate change as an iceberg and you as the captains of the Titanic. Big energy is telling you, don't worry, your ship is unsinkable. Keep going full speed ahead.

The world scientific community is telling you you've got an iceberg ahead of you, slow down and change course immediately.

For the Concerned Citizens of Montauk, I urge you to change course immediately. I urge you to remember what that metaphor called iceberg is. It's more hurricane Katrinas, more super storm Sandys, more droughts, more wildfires, deadly tornados and colder weather in Atlanta than Alaska. It's faster sea level rise and the acidification of the ocean.

It's what Secretary of State John Kerry

called the greatest challenge of our generation. A greater threat than disease, poverty, terrorism or weapons of mass destruction.

I urge you to change course and create a zero carbon plan in New York State for your children and for your children's children.

I have one more comment. 18 miles north of Montauk is a ticking time bomb, Millstone nuclear power station. It was built around the time of Chernobyl and should have been decommissioned years ago, long before we heard of the nightmare called Fukushima.

Millstone's horrible safety record made the cover of Time Magazine. Despite the protest of eastern Long Island, the United States Nuclear Regulatory Commission, which is 96 percent funded by industry, extended the life of Millstone. It will be 80 years old when it's decommissioned.

Let me ask you something: Did you arrive here in today in an 80 year old car? Did you take an 80 year old bus or an 80 year old train? Does the Navy use 80 year old ships? Or our Air Force use 80 year old planes? Of course not.

Yet somehow it's okay to have an 80 year old

nuclear reactor in this country. Once these things are built, there's no getting rid of them.

Thank you.

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CHAIRMAN RHODES: Thank you very much.

Once again, I do ask us to respect the time limit. We want to hear from all the speakers. We have a couple more trickling in. It's a courtesy in fairness to those who wish to comment.

Robert Frankum, to be followed by Laurie Heinitz.

MR. FRANKUM: I am a lucky resident of a progressive state, New York. Thank God I don't live in Louisiana or Mississippi or Texas or some other places. I hope New York will continue to be progressive in looking forward to new technologies, not looking back.

I note with some sense of irony and bemusement the bottled water, the frivolous waste of some of our non-renewable resources. I hope we're not doomed to privatize water. And I did notice some good citizens here in the audience brought their own refillable water bottles. Just a little something I picked up on the way.

I am also a lucky resident of Huntington.

My wife and I brought up our two children in that community. We're glad to be there and hope the quality of life will continue to be what it has been.

I would like to respond to Dr. Cordara's comment about Germany. I lived in Germany for three years in the 1960s, when life was very frugal, and I have been back several times since then. And I've noticed the progress that country has made.

It is a progressive country. It's progressed politically from its horrible history and it's progressed economically. It is now, as I am sure everybody here knows, the number one economic power in Europe. And it is on a course to eliminate all nuclear energy. I am convinced that Germany will succeed in this.

Could I bend the golden rule a little bit and say, thinking of a very, shall we say, notorious CEO at this point. Do not frack others unless you would have them frack you.

What else can I say? There is so much that has already been said, but people complain about the government subsidies of alternative energy plans. By golly, let's subsidize some alternative energy. We have

been subsidizing the oil and gas industries for decades. 1 2 That's a simple fact. Let's give a little kick to solar energy, 3 4 geothermal. Tidal generators, I haven't heard that 5 I don't know anything about them, but it mentioned. seems to me on Long Island it would certainly be a 6 7 viable alternative. There is more I would say, but I 8 think let's just look forward. 9 I will make one comment. I read in the New York Times several years ago about a Bavarian pig 10 farmer. He had solar panels on his farm. Farms in New 11 York are not large. It's a very dense population so 12 farms are small, but he powered up the entire 13 neighboring village with his solar panels. 14 15 If they can do that in Germany in that kind 16 of climate, why can't we power up our homes that way? 17 Thank you. 18 Thank you very much. CHAIRMAN RHODES: Robert Heintz. 19 20 (There was no response.) 21 Mike Bailey, followed by Eugene Falik. 22 MR. BAILEY: Good afternoon. My name is 23 Mike Bailey. I am a trustee from the Village of

1 Malverne.

I would like to begin by thanking you all, particularly Mr. Rhodes, formerly of the National Resources Defense Council, for your activities chairing this wide ranging process.

As a lifelong resident of New York, I'm proud that the New York State Draft Energy Plan set forth a big vision for New York State's future energy. Quoting, the boldness of our solutions should match the magnitude of our challenges.

I would like to briefly comment on three items today. First, as has been mentioned earlier, the ground source heat pump geothermal projects.

In Malverne, the mayor and the board of trustees have committed to saving tax money for residents with careful support of renewable and sustainable energy, including the soon to be completed ground source geothermal HVAC project in our own village hall.

The Cleaner Greener Long Island Regional
Sustainability Plan, which was mentioned earlier, Neal
Lewis who spoke earlier is the co-chair of that,
included a strategy regarding this to encourage

geothermal heat pump projects through education and incentives. It proposed the largest greenhouse gas savings of all the strategies considered on Long Island.

The State Energy Plan should provide much stronger support for greatly expanding its clean, efficient and smart technology.

Second, the Champlain-Hudson electric cable, which I don't believe has been mentioned today, I would like to ask if it's possible to consider bringing a sister cable along the route that could provide clean low cost electricity to Long Island, so that we could eliminate some of our outdated generation capacity.

And finally, electric vehicles and T to G storage, which has not been heavily discussed today. As identified in the impacts and consideration section of the plan, findings about the transportation sector in 2011, the transportation sector is responsible for 27 percent of the primary energy use in the state, 77 percent of all petroleum consumption in the state.

Produced 34 percent of our total greenhouse gas emissions, and worst still, 42 percent of the CO2 emissions from fuel consumption is just under 75 million metric tons of CO2 emissions each year.

It's good that there are important goals identified in the Draft Energy Plan concerning alternatives to internal combustion vehicles, and specifically electric vehicles. It's noted that the number of alternative fueled vehicles has been expanding, and New York aims to build on this momentum through strategic investments and policies.

And the stated goal is to increase the number of alternative fueled vehicles registered to one million by 2025. However, it should be noted that this is less than a 10 percent market share based on the 10.6 million vehicles, cars already registered in the state today.

As also stated in volume two of the plan, in July of 2012 alternative fuel vehicles already represented 5.8 percent of the registered vehicles in the state. The percentage has grown by 2.2 percentage points in just two years.

So, the goal, though more than a decade away, rejects a four-fold reduction in the current growth rate to less than half a percent a year. It seems the objectives in this area are very timid, particularly in light of the pace of growth that's

already being achieved.

The vision section sees a future of clean energy jobs, urban renewable, sustainable development and affordable energy and transportation, and the economic opportunity to achieve scale development of energy technology and services.

However, this disconnect between the stated goals and the opportunities, in volume two it's stated that the electric grid has enough capacity to supply electricity to EVs without major investments. And the smart grid and technologies built into the electric vehicles can enable smart charging or charging during off peak hours to help ease grid capacity.

EVs can also help ease electrical demand by providing vehicle to grid power. It's all noted in the plan. However, increasing the efficiency of the grid is a major goal, but it misses the opportunity to seize the leadership.

There is a global competition going on today to create the new Motown for electric vehicles. If the boldness of our solutions should match the magnitude of our changes, then the opportunity for grid storage, reduction of gasoline usage, and dramatic reduction of

greenhouse gases should be accelerated to seize the opportunity with leadership and economic development.

Thank you for your time.

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CHAIRMAN RHODES: Thank you very much.

Eugene Falik, followed by Judy Beck.

MR. FALIK: Let me depart from my prepared remarks for a moment.

I don't know that fracking is bad. I think the desirable way to achieve fracking would be to consult with Mr. Harry Potter or Hermione Granger, but in their absence, I think that we need to take into consideration that the state constitution requires that the forest preserve be maintained forever wild.

The New York City watershed is aided in New York City by our own water supply police, backed up by the city police. And I think if necessary to protect the water supply system they would be used.

Also, you need to consider that there is a Delaware River Basin Commission which regulates the watershed. As I understand it, the fracking is scheduled to take place in the Catskill forest preserve and the New York City watershed.

So, what will happen if these people were to

contaminate the water supply system? They promise not to, but I think that regulations must be adopted to require anyone fracking to post a bond large enough to secure the cost of repairing any damage to public or private property that they might cause.

Anyone engaged in the process of fracking should be required to demonstrate the resources necessary to replace any public infrastructure that might be damaged in a timely manner. By that I mean without danger to public safety and without unreasonably inconveniencing the public.

Water supplies should be replaced within 12 hours, electricity within 48 hours in winter and 96 hours in summer. Emergency communications, the ability to call 911, as well as emergency services internal communication, should be repaired within 24 hours.

And note that Verizon has an active policy, number one, of increasing electricity usage by switching people to FIOS, which requires electricity use in every home to call 911. That is less efficient than their current copper based system where they supply the system out of the central offices.

Special attention must be given to the risks

and costs involved in contamination of the New York City water supply system. What's the probability that fracking problem could contaminate the entire Delaware and Catskill reservoir system? What's the backup plan if the aqueducts were to be compromised? Could the reservoirs be flushed by dumping water into the Delaware or Hudson River? What would the impact be on the water levels downstream? Drinking levels downstream? How long would it take to flush the reservoir?

The New York City reservoir system impounds a half a trillion gallons of water. How long would it take to repair and flush it? How could over a billion gallons of water be supplied to New York City and Westchester supply customers with trucks? Are there enough trucks in the country?

What would the impact be on the federal government if New York City, which is responsible for approximately one tenth of the economic activity in the country, had to be shut down? Where would people go for shelter?

Let me just quickly touch on a couple of other things. Alternative generation. I think every flat roof should be required, through a taxing system,

to have electric generation on the roof providing it has the physical ability to support it. I think there should be a tax if people choose not to do that.

I think all electric lamps sold in New York should be required to have adequate information -- date of manufacture, true nominal wattage, color, lumens and lumens per watts. They should be required to have a minimal 49 month guarantee based on the manufacture date.

People should not need to hold the receipt.

Any store selling particular brands should be required to redeem a defective lamp or a lamp that fails to maintain adequate luminosity.

There should be a penalty of \$100 per lamp when someone sells a lamp that consumes more than 20 watts and fails to provide at least 30 lumens per watt. That would effectively outlaw all incandescence and all halogens.

There should be a penalty of \$100 per electric control device, such as switches and dimmers, that don't operate with these new bulbs. It's unconscionable that we have major retailers today selling switches that won't operate with these new

lamps. Unconscionable I say.

There should be minimum standards for electric motors, for internal combustion engines like gasoline blowers and snowblowers. I think you also need to look at the environmental impact of mass transit.

And I don't want to attack mass transit, but I think we need to know: Is there really a net saving when we take into account the energy used in operating the equipment? Not really a revenue service, but moving the equipment around, and heating and cooling the building where this equipment is maintained in the offices, and people running around to go to work on these systems.

We ought to know what the true cost is. And we also need to know that electric cars are not pollution free. Somewhere, the electricity is generated. It does not appear at our homes by magic. You need to talk about that in your plan, I believe.

Thank you.

CHAIRMAN RHODES: Thank you very much.

Judy Beck, followed by Terry Marrome.

Is Judy Beck here?

(There was no response.)

Terry Marrome, to be followed by Marriele Robinson.

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MR. MARROME: My name is Terry Marrome. I'm a member of the Green Party, Move On, and a few other organizations.

I would like to comment first on the economics of fracking. Companies make money by producing a product, and also by selling stock. And while fracking companies are not doing very well at all making a product, they are making a lot of money selling stock and gas and other things, which sort of amount to a subsidy from the public.

What happens is that they drill a well and the peak production in the first year, and the casings of the well fail very quickly and they start to pollute the water supply. The well runs dry in a few years and they just move on to a new place and they repollute the water in a new section here.

To make the energy transition is going to take real big bucks. Nationwide, I estimated -- rough calculation -- that it would cost \$15 trillion, which sounds like a lot of money. That's in 2010 dollars. It sounds like a lot of money except when you compare it to

the bank bailout. The estimates from CNN were 12.8 trillion and I've seen estimates as high as \$25 trillion.

So, it's really a political problem as well as a scientific problem. Do we have the political will? It seems like the political will is missing to spend the money, but the political will was certainly there when it came to bailing out the banks and the billionaires in this country.

I am a retired professor of physics. What I have noticed in the scientific literature is that global warming is slowing down. This is a dirty little secret that progressives don't often talk about. I mean I'm not sure that right wingers talk about it, but the latest studies show that it is slowing down and the question is why it is slowing down is the debate in the scientific literature.

Some scientists say it's because of oscillations in the Pacific ocean. Others say -- and this is becoming the prevalent view of it, I think -- is that aerosols, increased amount of aerosols in the atmosphere. And they blame it on the Chinese and the Indians for their coal fire plants dumping all kinds of

gunk into the atmosphere.

But it's established fact. A 2010 report in Science Magazine showed that the amount of solar radiation reaching the ground was diminished. They said -- in that article it said that the rate of global warming has halved since 2000.

But what the scientists are all afraid to talk about, except maybe some geoengineers who have been saying for years that geoengineering is possible, is that the amount of aerosols might be increasing because we're dumping them in the atmosphere with what's commonly known as a chem trail.

This is the easiest you could possibly want to verify because all you have to do is look up at the sky and try to remember when the skies were clear and we had nice blue sky days. There is less energy getting through the atmosphere. And I think that in the New York State energy budget, whatever, there should be money allocated to measuring the amounts of solar radiation getting through the atmosphere.

It just makes me mad as I hell when I go out and every single day I see clouds up in the sky. Long Island tried to convince the Suffolk legislature to pass

1 a resolution against spraying up in the sky. We didn't get anywhere. It was tabled I think forever. 2 3 But I don't expect very many political 4 leaders to have the guts to say anything about chem 5 trails because you would be labeled a conspiracy 6 theorist and people usually turn their brains off and 7 ignore all kinds of evidence when anybody brings up the 8 subject. 9 Slowdown in global warming is a reality. 10 Slowdown began in 1998 which is the same year they 11 started spraying. 12 Thank you. 13 CHAIRMAN RHODES: Thank you very much. 14 Marielle Robinson, followed by Philip Healy. 15 While she's walking about can I just check that Laurie and Robert Heintz or Judy Beck are here? 16 17 (There was no response.) 18 MS. ROBINSON: My name is Marielle Robinson. 19 I'm a project coordinator for Long Island Progressive 20 Coalition's Power Up Communities Program. 21 Thank you for having this hearing today. 22 After reviewing the 2014 New York Energy Plan, we at the

Long Island Progressive Coalition feel that New York is

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heading in the right direction.

Many of the initiatives hit at important issues facing New Yorkers, and with some alterations and expansions, this plan could help progress New York into a more environmentally friendly, economically viable future.

Since 1979, LIPC has been a grassroots community based organization that advocates for sustainable development, for revitalization of local communities, the enhancement of human dignity, effective democracy, and economic, social and racial justice.

The LIPC has held the fundamental belief that sustainable efficient development, particularly in our low to moderate income working communities, is paramount in reducing the socioeconomic disparities prevalent here on Long Island and throughout New York State.

As of 2011, the LIPC is the designated constituency based organization for Nassau and Suffolk counties, operating as an independent contractor to New York State Energy Research and Development Authority under Green Jobs Green New York program.

Working in aggregation, a concept outlined

in initiative seven of the energy draft, the LIPC's

Power Up Program is focused on outreach and assistance
in moderate to low income, underserved communities,

connecting homeowners with rebates, financing and
certified contractors, and receiving home energy
improvements.

In many of these communities, the residents believe that energy related work is out of their reach. It's either too expensive or too burdensome to take on. This misinformation, combined with the reality that much of our housing is old, inefficient, and prone to health and safety issues, is literally keeping parts of our state in the energy dark ages.

The LIPC believes that educating underserved communities about the practicality and sustainability of energy efficiency measures will result in more widespread buy-in to energy efficiency and environmental conscious options for everyone.

This community wide education and individual support utilized for aggregation, which is mentioned in the energy draft, will create more sustainable, affordable and overall better quality of life for every resident, especially those living in our lower income

communities.

Programs currently funded for the next two years, such as the Green Jobs Green New York initiative, need to continue past 2015 and be expanded upon. In addition to this, we believe that the energy plan needs to make significant investments in solar, wind and other renewable energy technologies.

Government and school buildings need to be upgraded and retrofitted and needed to be made a priority in our communities.

In order to continue energy efficiency opportunities and growth, particularly in our low income and underserved communities, as outlined in initiative one of the energy draft, we urge continued support from New York State in programs such as Green Jobs Green New York and beyond 2015.

The energy plan should support and enhance aggregation models moving forward, not only due to its great success in marketing energy efficiency improvements to underserved communities, but also for its potential to create an industry of good paying green collar jobs through community benefits agreements.

Providing a sustainable energy system across New York

requires hiring and wage requirements for all the energy work that is done.

We greatly support and emphasize the importance of initiative 15 of the energy draft, pertaining to workforce development in the green sector.

Training new workers from low income communities, with the focus on women and minorities, and retraining current workers in the industry, will help create pathways out of poverty and therefore must be a priority in 2014's energy plan.

Finally, the LIPC has a long history of supporting repowering of existing plants. Long Island has many old, inefficient power plants that waste energy, but also provide tax relief to local communities. We need to retrofit some of our old power plants and prevent new ones from being built while prioritizing renewable energy and expanding upon our current efficiency programs.

CHAIRMAN RHODES: Thank you.

Phillip Healy.

(There was no response.)

Will Schweiger, to be followed by Jessica

23 Roff.

MR. SCHWEIGER: Hello, and thank you very much for allowing me to speak and share my comments with the Draft Energy Plan. My name is Will Schweiger. I represent -- I'm here today speaking on behalf of Efficiency First New York, membership of home performance contractors statewide that comprises over 60 companies and over 400 individuals that are participating in making homes more energy efficient.

I wanted to speak a little bit to the goals of the energy plan. I know you are seeking to create jobs to really kind of revitalize the energy industry in New York, and the energy scope. And I believe through investment in energy efficiency it's a great way to do it.

A number of people here today spoke about ground source heat pumps, about solar, about wind power. I think those are all great, and on behalf of my membership I think that those are things that should be explored, but energy efficiency is something that I think everyone can agree that needs to happen in conjunction with that.

Only by reducing our energy usage in the first place do we make a lot of these technologies more

feasible, more cost effective, and make them more able to be adopted widely across the state.

2.0

A couple things about energy efficiency.

Our membership mostly works within the Green Jobs Green

New York programs, and various facilities programs here
in the state, to retrofit existing buildings. They

could be existing residential buildings as well as

municipal and commercial buildings. And achieve an

average of between 20 and 40 percent reduction in

whatever they are using, whether they are using a fossil

based fuel or renewable energy to heat and provide hot

water to the building.

And these often come with a rate of return on investment of within 10 years and many projects far less. You know, again, in the plan, you guys mention public/private partnerships. And there is no better example of that than the home performance community here in New York State, as well as Long Island, which has a very strong community.

New York State has aligned itself with private companies that are trained to test, recommend, and educate consumers about their energy use in their homes on a personal level, and then are in a position to

make improvements on those -- on their existing systems.

So, I think this is -- really, I can't say it enough. I think it's a really important path. You guys outlined it numerous times in the report itself, and in the draft. I think I would like to applaud you for that.

I had a couple of comments on what was proposed, and I will be submitting written comments following this later on today.

One of the things is increasing market penetration and customer awareness. I think that is a key piece of making our energy hopes for the energy future a reality.

You know, right now our market penetration is one percent or less for sure. Until we have reached that critical mass where people actually start seeking these services, we are going to have to do a better job at incentivizing and finding new and innovative ways to spur interest in these programs and initiatives that have already been established.

The second thing is there's been the EEPS restructuring plan that's been proposed at the Public Service Commission and has been ruled upon. I would

just like to voice our association's wholehearted thanks for that, thanks and support of that effort. I think it's going to go a long way towards revitalizing the energy efficiency industry in New York and making all the things that are envisioned in this report a reality.

Specifically outlined within that report, I feel it's worth mentioning now, is moving to a system where we promote energy efficiency with a fuel neutral approach. Regardless of the fuel that people are using, whether it's fossil based, whether it's solar producing energy that they are heating their home, or with whatever they are doing, they should be included within the existing energy efficiency program structures.

I think having one type of fuel or another should not preclude them from participation because reducing energy usage anywhere, I believe, is in all of our best interests. That also helps us with market penetration if our membership knows that it can market to anyone and help get them involved.

I see my time is up, but I would just like to give you my thanks once again for allowing me to participate, and to encourage you to capitalize on the existing robust energy efficiency structure that has

already been in place.

Thank you very much.

CHAIRMAN RHODES: Thank you very much.

Jessica Roff, to be followed by Kim Fraczek.

MS. ROFF: My name is Jessica Roff, I'm a fourth generation Brooklynite, and I'm involved with a number of environmental organizations fighting against climate change, and I've done Sandy relief work for the past year and a half.

I want to thank you for the opportunity to testify, but I also want to say it's really -- this is not a valid system right now for commentary. There are only times during the day for people to come and comment and very few people actually are available to do that.

Take my testimony as representing thousands of other people who actually have paid jobs. Sadly, I do not so I have the ability to do it. But you should have evenings, you should have weekends, there should be more than five opportunities to testify here in New York State when we are talking about our energy future, which is the future of our entire existence. Frankly, it's disrespectful of the people of New York State to not offer more opportunities for that.

I would like to say also this is another failed opportunity for Governor Cuomo and New York State to be leading on addressing climate change and being a leader in figuring out an appropriate energy plan moving forward.

This plan is entirely based on a false premise that natural gas is a clean energy. It is not. It is a fossil fuel. It is dangerous and destructive. These are huge problems on the entire plan.

Initiatives 6, 8 and 9 are all pushing for a build out and expansion. That is not going to help us.

If we keep building out fossil fuel infrastructure, then we are going to continue to destroy communities throughout New York State.

People in Minisink are already getting sick from a compressor up there. People in the Rockaways are barely recovered at all, and some people are not at all recovered, and they are building a Rockaway pipeline, which is, one, going down one of the major exit routes, one of the main transportation hubs, and two, this is going to bring fracked gas, highly toxic with radon, into people's homes. That is another massive problem.

I'm glad that the plan is actually starting

to talk about carbon dioxide and addressing some of the emissions issues, but there are no real standards and benchmarks for addressing it in the plan.

In addition, it's like sticking our heads in the sand by only talking about carbon. We need to be talking about methane already. It took us 40 years to get us to talk about carbon. That's great. Methane is more destructive. It needs to be addressed.

When you base an entire energy plan on the use of "natural gas" then you are just exacerbating the problem that leads to a situation where we have the Rockaways.

So, three minutes. I'm going to talk really fast.

Also the problems regardless of whether we drill in New York. Yes, I want a ban on fracking in New York, but I don't want to destroy our neighbors in Pennsylvania for our energy costs. That's not fair. It's not a productive solution. We need to be moving all of this forward towards actually having a renewable energy plan.

And we need a comprehensive plan that involves energy efficiency. You can't address energy

choices without addressing energy efficiency, and that is not addressed with real bench marks or real numbers or real money put away in this plan.

Transitioning to renewables also has to be done in transportation. Our transportation system is completely dependent on fossil fuels in this system. We need to be transitioning towards electric and other positive ways to power our transportation system.

The boiler conversions that are pushed in initiative 9 are also a false premise of this is a good thing. Burning methane is actually more destructive than burning coal and it needs a massive particulate matter as well. The whole purpose of these gas boiler transitions is supposed to make it better for people with respiratory and asthma, and it makes it worse. It's not clean. It's not healthful. It's not moving forward.

We need to be promoting wind power, such as the Long Beach offshore wind farm, and not approving a Port Ambrose LNG port. They are for the same location. It can't happen. If we shut the coal and natural gas and nuclear power plants, we will be moving forward. We have to be stopped subsidizing the fossil fuel industry,

because if we are subsidizing the fossil fuel industry it's not a fair playing field to be working towards renewables.

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In fact, if we take the subsidies and put them toward renewables, we will actually move the system forward and that will be much more productive.

Also, the Green Bank that's addressed in this plan seems to be there's too many questions open in it if we are investing in fossil fuel because, as I said, it's a false premise that clean energy includes natural gas, which it does not, then we will further be subsidizing investments in something that's only destructive.

There's no description of what the public/private partnerships must be in this plan. And I, as a cynical New Yorker, am convinced that would probably be a lot of fossil fuel money, if you ask me, based on the fact that a lot of this language actually looks like it came straight out of publicity information from the natural gas industry. That is a warning sign right there.

Further, let's see, that raises issues of initiative 11, talk about transparency and energy

choices. We need to actually know where the money comes from. We need to have true energy choices. Most people don't have that. If we give lip service to transparency but there's no actual choices, it doesn't matter. If you are choosing between natural gas, tar sands and nuclear, that is not a choice in energy. That is a public health crisis.

And that is where we are. We are at a critical point in New York State and in the world, and if we are going to build forward after rebuilding from Sandy, then we need to be making a transition to renewables, which most of us already know, although it seems the governor is unwilling to make that bold step.

And our choices have to have an impact on what we do day to day. It can't be whether we turn on our television or not. It has to be about what energy is doing to the actual climate in which we live.

We need to be moving towards renewables, we need to be investing money, we need to be giving our lip service and actually putting our walk in the walk and not just talking the talk, in order to prepare for the future and our energy choices.

CHAIRMAN RHODES: Kim Fraczek, followed by

Rich Thomas.

MS. FRACZEK: First, I would like to address the same point that Jessica Roff had just made about asking for public input on very important energy policies. Six locations on inconvenient weekdays, I'm getting a feeling that New York State isn't quite interested in getting real input from New York State residents.

I reviewed the plan initiatives and I want to add a few highlights for you to consider.

Initiatives one and 11 mention wanting to keep information clearly labeled and accessible to the people of New York.

And I would like to point out that there's a bill right now in the health committee, bill number A6863, which is going to demand that our utility companies monitor and report levels of radon that are coming into our state from the new natural gas coming from fracking in Pennsylvania.

Initiative two discusses building models for our energy sources. We must turn off fossil fuel consumption and retrofit and switch to doable renewable and sustainable energy sources.

Initiative four encourages business to invest in clean energy, and we'd like a tighter definition to include what clean energy means, because my community does not include natural gas as a form of clean energy as is marketed to be on TV and radio.

Initiative six is asking to modernize infrastructure but includes fossil fuels such as gas, as it includes modernization of gas delivery systems.

Instead, the words "and gas" should be eliminated from this initiative and all support for further fossil fuel development should be eliminated from this initiative action plan.

I applaud initiative seven to support community based energy, however, the details of public/private partnerships that are intended to usher in economic growth need to be clearer. Partnerships with fossil fuel companies or fossil fuel infrastructure companies are not advantageous to the long term economy of New York State for a stable climate.

Initiative eight, this is completely out of line for a forward thinking state. If New York State is spending funds on rebuilding fossil fuel infrastructure, and protecting that infrastructure and its citizens from

devastating climate change induced floods, why would this plan agree to an advocacy of fossil fuels as future floods become worse?

It is truly discouraging to see a well thought out plan to adapt the climate change but similarly experience plans to prevent it from reaching catastrophic, unsalvageable levels.

I know my time is running short, but many of my comments about the initiatives have been submitted in writing.

What I see is that our government likes to talk about renewable energy but we are not actively putting this to work. I'm appalled that Cuomo is considering the Port Ambrose LNG port in the same exact place as an offshore wind farm to frack the US up and ship it out to the highest international bidder.

We are rolling out the red carpet for a natural gas power plant in Middletown that will poison us. My friend in Minisink, New York, right now, in the middle of lush New York State farmland that supplies our farmers' markets with fresh organic food, are suffering with dizziness, nose bleed, poisoned soil, because of the natural gas compressor station, because we continue

to invest in fossil fuels instead of taking a chance to be a leader.

And I also want to point out that our senators are not paying attention to these people who have been standing outside their offices to deliver a letter. They are being completely ignored.

I just returned from a trip to West

Virginia. We could not even brush our teeth with the water there, blistering from the current chemical spill mess there. Our hosts provided us with purchased bottled water. Business owners are taking out bank loans to keep their businesses going and have to purchase water now to make ice cubes for their restaurants.

Kids can't take baths. Parents can't clean their kids without purchasing paper products. This is because of our continued investment in fossil fuels. Is this our future if we don't take renewable and sustainable energy seriously? New York State is looking into our future. It is West Virginia if we continue to invest in fossil fuels.

Our next door neighbors in Pennsylvania are losing their water, home values, farmland, right in line

like West Virginia. New York should say no to being a customer to this form of energy, energy, let alone offering its citizens up to sacrifice themselves for a company's profit to get funneled into tax savings through Wall Street, leaving us poisoned and voiceless.

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We are in a unique position right now to say no to caveman energy and be true leaders standing up to a giant, smothering industry, and creating an example for a healthy, sustainable future.

We actually have the choice to be healthy and happy. It breaks my heart that we have to beg the little that is left of our democracy to take care of its citizens. Thank you.

CHAIRMAN RHODES: Thank you very much.

Rich Thomas, to be followed by Andrew

Collver.

MR. THOMAS: Good afternoon. Thank you for the opportunity to share our views on the proposed New York State Energy Plan. My name is Rich Thomas, and I'm the Director of New York AREA, which is an acronym for Affordable Reliable Electricity Alliance.

We were formed shortly after the 2003 blackout and promote policies to ensure that New York

has ample clean, affordable and reliable electricity.

I am here today on behalf of our chairman

Arthur "Jerry" Kremer, who hails from Long Beach, having
been chair of the Assembly Ways and Means Committee and
principal author of New York's Power Siting Laws.

The 2014 Draft State Energy Plan begins an important conversation about the economic and environmental future of our state. The plan provides an encouraging start and we offer the following thoughts on affordability and reliability to help improve the draft plan.

For starters, the plan should set a goal of keeping more of New York's energy dollars in the state.

According to the plan, New York currently imports 15 percent of its electricity from Canada and other states.

We should be a net seller of power out of state.

This will ensure we have abundant energy infrastructure, with good paying, skilled middle-class jobs, while keeping billions of dollars in the state annually to stimulate, and in some places revitalize, the state's economy.

We should never be at the mercy of out of state providers of energy who could have an economic

stranglehold on our economy.

Subzero temperatures and frequent snow storms between January and February 2014 pushed some energy systems to their limit. According to the Montreal Gazette, Hydro-Quebec was nearly unable to meet its demand and required some New York-generated electricity to rescue its ratepayers from rolling blackouts during the deep freeze.

At the same time, the New York Independent System Operator, NYISO, reported that New York set a new winter electric demand record of 25,738 megawatts of electricity on January 7, 2014, eclipsing the 2004 record of 25,541 megawatts.

In June 2012, Con Edison warned that the lack of fuel diversity would cause significant price volatility for ratepayers, especially in natural gas prices.

Fast forward to today. Our energy system has grown more reliable on natural gas and system constraints have brought Con Edison's forecast to fruition.

The U.S. Energy Information Administration indicated that the northeast experienced record

withdrawals from the northeast's natural gas reserves this winter. These increases are especially hard on those with fixed incomes and the poor.

Given the supply shortage and steep rise in demand for heating and electric generation needs, Long Island ratepayers paid a \$17 surcharge for natural gas beginning on January 1, 2014, and have been subject to six subsequent rate increases by the Long Island Power Authority, whose system is now managed by PSEG.

A Newsday article quoted a ratepayer as saying, "this bill just killed me", said William Jones of Wading River, referring to his bill that jumped to \$435 from \$179 last month.

An issue brief by New York AREA Chairman

Jerry Kremer provides additional insight as to why Long

Island ratepayers are struggling to achieve an

affordable energy system.

He notes that the premature closure of the Shoreham nuclear plant contributed 5.6 billion in debt to LIPA's balance sheet. This translates into \$2,074 for every man, woman and child living on Long Island. For a family of four, a little over \$8,000. And this is just principal alone.

The State of New York should carefully consider lessons learned on Long Island and the impact of higher electric rates for the rest of the Empire State, and end its opposition to license renewal for Indian Point, which supplies 11 percent of New York's power.

Indian Point has earned the independent US

Nuclear Regulatory Commission's highest safety rating in
each of the past nine years and has virtually zero
carbon missions.

Another important solution to New York's energy challenges is the Port Ambrose deepwater port project, which would be located 18 and a half miles off the coast of Long Beach. This project offers an opportunity to increase reliable access to natural gas for winter and summer peak periods.

The ICF International estimates the pricing impact to be as much as a four percent reduction in the overall annual price of natural gas. Also, it would offer much needed stabilization because of impacts on cold peak winter days.

This represents an annual direct savings of up to \$325 million for New Yorkers. If the naysayers

continue to oppose projects on land, then why scrap any effort to build something in the ocean? It's got to be sited somewhere, especially when the pipeline already exists.

As previously noted, pipeline constraints have dramatically increased the price of natural gas in the region. Port Ambrose increases access to a reliable flow of natural gas to deliver more supply into the Long Island, New York City, and downstate market, thereby reducing price for customers.

Port Ambrose will also be an important economic benefit for the region's economy as it will create over 600 construction ready jobs, provide an investment of over \$90 million in local goods and services. Further, it will not be an export of gas out of the region. It will provide for gas users in this region who desperately need it.

We commend the state for embarking on this long range study of our energy needs. This is not the time to slice and dice the plan to accommodate some groups that oppose a particular form of energy. Our state needs more power, not less.

I have written comments and I will submit

them.

CHAIRMAN RHODES: Thank you very much.

Andrew Collver, followed by Bob DiBenedetto.

MR. COLLVER: My remarks are about the technology of these renewable energies. They have been talked about like they are here, let's go out and buy them. I think it's like when you go buy 1980 computer or something. We need upgrading and innovations.

In 1975, I dared to be a pioneer in renewable energy. As director of interdisciplinary program at Environmental Studies at Stony Brook, I thought it was my duty to show a good example.

The system I tried was made of aluminum roof panels blackened to maximize heating. The heat was captured by a refrigerator gas, circulated through the panels, and then to a compressor. I was told that the compressor reached 800 degrees. It was powerful enough to keep us in hot water all year round, and then to heat the house night and day through the winter without any help from the oil burner.

Well, the demands on the compressor proved to be too much and it burned out. After a second compressor failed, sadly, I had to go back to the nasty

habit of burning oil.

I don't know whatever became of that system, but it still seemed like a great idea to me. All it needed, as far as I know, was a compressor especially designed to operate at high temperatures.

The other day I was looking at some solar panels at an exhibit. They, too, are black. I thought how much heat they must produce in the summer. Probably they would put out more heat than electricity.

Why waste that heat? Can it be put to work heating water? Could it be converted into electricity somehow? And could electricity generated in the noonday sun be saved in a small, affordable storage device in the basement for use at night and then cloudy days and the blackouts of the electrical grid?

No doubt scientists have theoretical answers and complex equations to show that these things can be done, but I don't see practical applications that are in any store or yellow pages.

These are the kinds of questions that I would like to see addressed in the New York Energy Plan. How are we to fund the research and custody, trial and error process of looking for the most efficient and cost

effective materials and designs?

How are we to support the pioneers who dare to start new businesses producing and installing new systems? This can't be done by a lone tinker in a garage or a barn. It calls for the kind of resources that we have already in the state university system and Brookhaven Lab.

The tools and talent are there, but we need to put them to work. That takes money. Not money that a private entrepreneur can afford to invest. Big energy corporations could do it, but they have no incentive to do so as long as their supply of fossil fuels holds out.

An answer, I suggest, is to collect a tax on coal, oil and natural gas, and use that money to fund research development and early entrepreneurship in renewable energy.

The Empire State and Long Island are known as leaders in many fields, but it won't do to sit back and reminisce about our past glory. The question is always, what have we done lately? Let the answer be:

New York leads the transition to renewable energy.

CHAIRMAN RHODES: Thank you very much.

Up next, Bob DiBenedetto, followed by Tim

Reilly.

MR. DIBENEDETTO: Thank you. My name is Bob DiBenedetto. I am the president, executive director, and one of the founders of an organization by the name of Healthy Planet. We teach people about how their food and lifestyle choices impact their body and the world in a very profound way.

First, I would like to mention that we encourage the part of the initiative number nine that supports research to enable the quantification of public health benefits so that they may be incorporated into energy planning and policies.

MIT recently estimated that air pollution causes 200,000 early deaths each year. Energy planning and policies created without properly quantified public health impacts are dangerously inadequate.

Every energy policy decision ought to be made with quantifiable public health impacts as part of this equation. Those suggesting that fossil fuels and things such as liquid natural gas are going to save us money are not in touch with the fact that burning fossil fuels have monetary, health, social impacts on all people living on this planet.

With that in mind, second, while the plan commits to reduced greenhouse gas emissions in New York by 80 percent by 2050, there are almost no specific interim goals or benchmarks for the state to meet before 2050. That is a problem.

A few years ago, the Long Island Clean Electricity Vision Report was released. It outlined a blueprint and cost estimates for getting Long Island 100 percent off of fossil fuels for residential electricity generation by 2020, and a plan to get 100 percent away from fossil fuels for use for electricity generation for all purposes by 2030.

It's that kind of vision, together with clear mandates for enforceable benchmarks along that path that we need in New York State. We can't treat it as just an idea. It needs to be a vision with a plan.

I will also echo the sentiments of many other speakers that the state should recommit itself to meeting the energy efficiency and renewable energy goals it set for 2015, and set even more aggressive efficiency and renewable energy goals for coming years.

We support the extension of the state's renewable energy target to committing to deriving 50

percent of New York's electric energy from renewable energy sources by 2025.

When we look at other forms of energy and we say that they are cheap, such as natural gas, and we ignore their health impacts, and yet we take something such as energy efficiency, that puts people to work and is completely about reducing energy use with the same impact as adding more fossil fuel energy use, but without any of the downside, we think people who are promoting fossil fuels are only looking at half the equation.

And we also would suggest that New York

State commit very soon to decommissioning its nuclear power plants and abandon any plans to increase energy generating capacity from nuclear sources.

There is no solution for the problem of disposal of highly radioactive waste produced by nuclear power plants, and ongoing toxic releases from these plants, both planned and accidentally, they pose catastrophic risks to humans and the environment.

And Long Island is still paying the price for bizarrely myopic decisions made around nuclear at Shoreham several decades ago. Bizarrely myopic. And

speaking about bizarrely myopic, we have a very bizarre situation in our country right now.

We have all the scientists in the world, all the credible scientists who are clearly stating that climate change is a problem, and yet we have politicians on a national level stating such things as, well, climate change doesn't exist. We used to think it was global cooling. Now it's called global warming. The earth hasn't cooled -- hasn't warmed in the last 15 years. Therefore, there is no climate change.

I say bizarre because it's not true. There is a clear scientific consensus, and it's good to see that New York State has acknowledged this clear scientific consensus.

What we would like to see, however, going forward, again, to reiterate, is a plan to take what we know and put it into action, as if it was a life and death situation, because it really is.

And the fact that it's a life and death situation could explain why there's such emotion coming from the audience when someone tells them that something that has the potential to sicken and kill their children is good for Long Island.

1 Thank you. 2 CHAIRMAN RHODES: Thank you very much. 3 Tim Reilly. (There was no response.) 4 5 Corey Tyler. 6 (There was no response.) 7 Tom Ryan, to be followed by Charlotte Koons. 8 MR. RYAN: Chairman Rhodes, esteemed board, 9 good afternoon. My name is Tom Ryan. I currently work on Long Island and have been a 20 year plus resident of 10 Nassau County. I'm also the president of Boilermakers 11 Local 5. Our geographical jurisdiction covers almost 12 the entire State of New York. 13 14 Today I speak on behalf of my membership, 15 the hundreds of boilermakers, blacksmiths, and metal 16 work mechanics of New York State. We believe it is critical to take a realistic and balanced approach to 17 safeguarding our energy future. 18 19 We urge New York State to support the clean 20 and efficient production of energy by hydropower, 21 natural gas, nuclear, oil and coal responsibly. We find aspects in this plan to be troublesome to the 22 23 hardworking taxpayers of the state.

Volume one, page 49, issue 15, a retraining on short courses? Volume two, page 122, however, there continues to be critical shortage of skilled workers?

We have highly trained, highly skilled workers.

Boilermaker apprentices have to meet 6,000 hours of hands on build instruction, plus 600 hours of classroom instruction, and a plethora of safety training, before they are even considered for graduation to journeyman status. What we need is repowering, not retraining.

Further on, volume two, page 122, New York's total electricity requirement to meet the need of all sectors combined is expected to grow at an average annual rate of 0.7 percent every year from 2012 to 2030. Further on, it talks about the seismic risk to Indian Point on page 164. On page 163, the aging infrastructure. It states that 59 percent of electric generation was constructed before 1980, with an average age of steam generation in New York State of over 40 years.

And I have to ask: Then why is the governor, via-a-vis the Public Service Commission, not granting final power purchase agreements for plants

already sited and welcomed by the local populus, such as Cricket Valley Energy and CPB Energy in Waywayanda?

What about underutilized space, already sited and zoned for power generation, such as Barrett Station and Island Park. To dismantle this in New York State, will their power production also be impaired?

As for the New York Green Bank, \$1 billion of taxpayer dollars out the window, financing unrealistic energy, unhelpful for New York's base load power. Going to foreign countries? Powering across borders?

Please, stop taking blue collar tax dollars to stop green collar job creation. Please let New Yorkers power New York.

On volume one, page 56, there's a quote that one of the goals in the energy plan is to increase New York energy dollars to be retained in the state.

We, the people of New York State, implore you to please do this efficiently and responsibly and stop the Champlain Power Hudson Express. Please keep generation of power localized in New York State. Let New Yorkers power New York.

There's one key takeaway here -- and I

respectfully understand that Governor Cuomo does not have the time nor the energy to read all through the public records -- but if there's one key takeaway I would love the governor to know, that Canadians and out of state workers cannot vote to reelect him as governor of New York State.

We respectfully ask the Public Service Commission and this board to let New York State be powered and energized within New York State by New Yorkers.

Thank you very much.

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CHAIRMAN RHODES: Thank you very much.

Charlotte Koons, followed by Gladys Paulson.

MS. KOONS: Good afternoon. I have been a resident of Eatons Neck Northport for 56 years, and I live in a two acre zone where I have a herd of seven deer and lots of foxes, etc., and try to be as energy efficient as I can.

But I am here to speak out, courtesy of Food and Water Watch, that really online let me hear about this. And I would like to end this with a poem.

At almost 80, I must keep hope alive. As a child of immigrants I have thrived here on Long Island's

shore. Cozy home, dear friends, my health, who could ask for more? Yet in all good conscience I must speak out about Governor Cuomo's NYSERDA plan, which has some fine rhetoric and lofty goals, yet which has us stick to fossil fuels and does not really address the LNG export facility planned for Long Beach's pristine sands.

We here on Paunmonok's fish-shaped isle cannot keep still while recalling Sandy's devastation and this brutal winter's realization that climate change has gripped this nation, and that the NYSERDA plan offers no real solutions to dirty energies, escalating pollutions.

Governor Cuomo, hear our pleas. There needs to be some real-time strategies and funding for Long Island's needs. Thank you.

CHAIRMAN RHODES: Thank you very much.

Gladys Paulson, to be followed by Elizabeth

18 Broad.

MS. PAULSON: Good afternoon. I'm following poetry with prose, I'm sorry for that. I love that poem.

My name is Gladys Paulson, and I thank you for being willing to hear the opinions of the people of

New York State. I am here to urge you to make renewable energy the prime focus of the New York State Energy Plan, and to not allow New York State to become a facilitator for the use of fossil fuels that damage health and the environment.

On a personal note, we in my first family are lifelong residents of the highly polluted New York metropolitan area, which means that we lived during the time of leaded gasoline and the heavy air pollution of the 1960s, specifically in Queens, Brooklyn, Long Island, Suffolk County and Westchester.

I am a survivor of breast cancer. My sister is a survivor of thyroid cancer. And my father is a survivor of basal cell and squamous cell carcinoma. My mother, who died in 2011, was diagnosed with bladder cancer, breast cancer. My other sibling, my younger sister, moved away from the New York metropolitan area in her 20s. She has never had cancer.

As your energy plan states, damage to health and the resulting economic impacts will be lessened if we switch to alternative fuel sources. Unfortunately, natural gas is seen as a cleaner than coal fuel, which it is not, if all the steps taken to extract the natural

gas and release of methane into the air are taken into account.

We are all aware of the hundreds of diesel truck trips that are needed to build in fracked wells, the migration of fracking fluid and methane below ground, the need to transport and store used water, the poisoning of wells, animals, people and land, and the tearing down of trees to make roads for heavy equipment.

We all know that clean natural gas is really a very dirty business. In the movie Triple Divide, which was shown at the Rosendale theater last week, I learned that the pressure that lead the fracking fluid into the ground not only cracks the shale it's intended to shatter, but creates a pressure bubble, which is surrounding the targeted shale.

This pressure bubble may cause unintended vertical and horizontal cracks that would allow methane to travel in unforeseen directions for unknown distances.

Fracking causes a lot of unforeseen,
unknown, uncontrollable reactions which make it
inherently unsafe and certainly not clean. What makes
fracking even dirtier than the problems mentioned above

is the fact that the gas companies are rarely held accountable for the damage they cause to people, land, water and air.

If recent events in Pennsylvania and West Virginia are any indication, the government agencies created to protect their citizens are often to protect the deep pocketed corporations that cause the damage.

The dirty business is not in the interests of New York and certainly is not appropriate for a state that should be a leader with all the resources and intelligence and universities that we have here, a leader in the movement towards renewable energies.

New York State has a wonderful opportunity to go forward with wind power off Jones Beach and Montauk Place. The jobs created may allow manufacturing to return to New York, especially with the tax free zones that are being established, but our state's leaders must be focused on getting away from fossil fuels, and the energy plan should reflect this.

A strong belief that it can be done and willingness to support renewable energy needs to be evidenced. Unfortunately, the building of a natural gas line, compressor station, and the debate over the Port

Ambrose LNG site, belies the state's dedication to renewable energy.

New York needs to stop waffling and make a firm commitment to move away from fossil fuels, and stop relying on natural gas to make it a so-called green state. The leadership needs to be there.

In the 1970s, when there was no oil, we drove smaller cars at a lower speed because it was needed and because it was mandated. Our president wore a sweater so he could turn down the thermostat. Solar panels were installed on the White House roof.

When the oil crisis was over, our nation went back to bigger, bigger cars, higher speed limits, a massive number of wells to blast the shale, and we are reaping what we have sown in our worsening health, birth defects, air pollution, water pollution, light pollution.

We have to look at the total cost of the use of fossil fuels, not just the price for gallon of BTU.

And when we do you will see there is no such thing as cheap energy when it comes to fossil fuels.

I'm grateful for the opportunity to share with you my thoughts about the energy future of New

York. In conclusion, in addition to banning fracking outright, I would ask that the New York Energy Plan include instituting a carbon tax, and include a study for a recommendation that school buses that run on petroleum diesel be phased out because those fumes are very, very bad for little children.

Thank you.

CHAIRMAN RHODES: Thank you very much.

Elizabeth Broad, followed by Beth Fiteni.

MS. BROAD: Hello. I am here representing Catskill Mountainkeeper. Thank you for giving me the opportunity to speak. As it's already been said, it would be great if there were more hearings and during the weeknight and weekend hours.

A couple of weeks ago, Secretary of State

John Kerry declared that climate change can now be

considered another weapon of mass destruction, perhaps

the world's most fearsome weapon of mass destruction.

He compared climate change deniers to people who

believed the earth was flat. We need to see clearly, as

the Secretary of State urges, and also to take action.

Every reputable scientist in the world has been sounding the alarm for some time that unless we

drastically cut our greenhouse gas emissions, the apocalyptic weather we have been experiencing is only the tip of the iceberg, which is ironic, since Arctic ice itself is melting at a record rate.

Given the dire, unprecedented global crisis we face if we do nothing, the State of New York must act boldly, showing real leadership by formulating and presenting an ambitious plan of action that would slash greenhouse gas emissions and transition from a fossil fuel based economy to one run on renewable energy.

Unfortunately, the Draft New York State

Energy Plan only perpetuates the use of climate change
accelerating fossil fuels, and would meet energy needs
by producing or importing massive amounts of fracked
gas.

While future goals should include limiting all greenhouse gas emissions, this plan would only commit to reductions of carbon dioxide until after 2030, ignoring methane, which the Intergovernmental Panel on Climate Change says will contribute to global warming 86 times more than carbon dioxide over the next 20 years.

Increased usage of fracked gas would also require construction of a massive shale gas

infrastructure, including compressor stations and pipelines, that pose major health and safety risks.

In the town of Minisink in Orange County, a compressor station was recently built in the middle of a residential community, causing a major disruptive impact, and there are serious concerns that local residents are becoming ill from air emission.

Adding insult to injury, many Minisink residents are first responders from 9/11 who left the city for a clean environment for their children. Now these first responders are suffering from increased involuntary exposure to toxic chemicals in their own backyards.

The enormous health risks associated with air pollution caused by compressor stations are also not taken into account with this draft plan.

Rather than building a fracked gas bridge down the dead end road of fossil fuels, we should support the work that is already happening in New York State to expand renewable energy development. Power generation from wind and solar more than doubled in our state between 1990 and 2012, surpassing any other energy source.

This plan unfortunately makes no significant commitments to increase the proportion of our energy produced by renewable sources in the long term, despite substantive academic research showing that the technology and capacity to create 100 percent of New York's energy from renewables is possible by 2050. All that we are lacking is the political will.

Just over the border from Pennsylvania, where fracking has caused significant water and air pollution, lies Broome County, the oil industry's first fracking target in New York.

But even now, southern tier pioneers are developing an exciting campaign to expand solar to more households, schools, businesses and municipalities to show that we can create real energy independence that doesn't contaminate the water, pollute the air, or risk major explosions.

The number and diversity of people in Broome County who are committed to this project demonstrates that renewable energy can be a viable alternative to shale gas. Binghamton gets 20 percent more sun than anywhere in Germany, one of the countries that is leading the world in the use of solar energy.

We have a chance to turn things around in our state and the country at large, but we need the drafters of this plan to be as ambitious as my colleagues in the southern tier.

It's truly laudable that Governor Cuomo has announced major initiatives, such as expanding and extending the New York Sun program, and launching K-Solar, so that New York State schools can serve as demonstration hubs to increase solar in their communities.

Another very exciting new initiative is the creation of the Green Bank to accelerate the flow of private capital to energy efficiency and renewable energy projects in New York.

However, if clean energy includes the use of fracked gas, it will negate the potential success of the Green Bank, and ultimately, the legacy of Governor Cuomo and our state to lead the world.

We have a tremendous opportunity to act as leaders, so let's not squander it with weak goals and continued reliance on dangerous fossil fuels like gas.

CHAIRMAN RHODES: Thank you very much.

Beth Fiteni. She is the last request.

Afterwards, I will go through the six folks who have been no shows to see if they are here.

MS. FITENI: Thank you very much. I'll be very brief. I know most of the people in the room have been working on energy issues for many years on Long Island, and I just wanted to enter into the discussion a couple of studies that have been done on Long Island, so they are Long Island centric but they may help inform the state plan.

One I think was mentioned already. It was done by Renewable Energy Long Island, an organization that was here earlier. Actually, they hired Synapse Energy Economics to do a study saying that we could power all of Long Island with renewables by the year 2030. It's a very interesting study. They achieved those conclusions.

So, it's something to look at. I'm happy to put this in writing later on with my comments.

Also there was a carbon footprint study that was done by the Roche Foundation several years ago, and I believe the goal is to look at the carbon footprint of Long Island regionally every five years, and I believe now it's NYIT that has taken up that study. And also of

course the sustainability, the regional sustainability plan.

Someone also mentioned many of the organizations on Long Island helped put that together, including the one I work for during the day, but I'm not representing them right now.

One other thing I just wanted to mention is that, while I have been working on energy issues for many years, one of the sort of gaps that I see is with solar thermal. As far as I know, I remember LIPA did not really have an incentive for solar thermal, just solar hot water, except for people that had electric heating. NYSERDA's program is the same way. So, it's just sort of a gap that leaves out a lot of people from having an incentive for solar thermal, which is a great way to use solar energy.

Just in general a final comment is that there is a lot of confusion about incentive programs on Long Island. In my job, I happen to represent one of these agencies, I don't want to say which, but I ended up really giving advice to my customers on all of them because we have incentives from NYSERDA, also now from PSEG, National Grid on natural gas, and also from NYPA,

who works with municipalities.

so, it is really confusing to sort of navigate all the different incentives. So, I recently read the EEPS restructuring plan, the energy efficiency portfolio standard plan. I'm really encouraged to see that there's an effort towards streamlining all of that, and getting all these entities to work together, because it's so confusing. So, if that could be part of the state plan, too, that would be great.

Again, I'll put my comments in writing.

Thank you very much. Thanks for hearing my comments.

CHAIRMAN RHODES: Thank you very much.

We have no new requests. May I just quickly check the room for Laurie Heinitz, Robert Heintz.

MS. TOBY: My name should be on the list.

CHAIRMAN RHODES: Please come up.

MS. TOBY: My name is Jill Toby. I'm here on behalf of Food and Water Watch and also as a resident of Long Island. I have to pull from somebody's comments it's got to be sited somewhere here. Thank you very much for coming to hear what we have to say about that.

I don't know why it has to be sited somewhere and what it is, but here are a couple of

comments I would like to make. Thank you.

This is an ongoing discussion about an addiction and a presumed helpless continuation of energy appetite and mindless greed. Methods of conservation, green architecture, city planning, and health promoting lifestyles, proliferation of predatory, lucrative and radiological sickness and disease treatment are constantly preempted by commercialization and reliance on destructive utilities.

The hospital, by the way, as I am sure you know, is the number one employer here on Long Island. These utilities operate to prop up profits to ensnare all the earth systems in costs and concurrent pension investments held hostage, which I think explains a good deal, maybe explains a good deal of the reason why it isn't such a simple task for these to move from here to there.

If one looks at the mutual fund log of participants, the big earners are always the same ones. It doesn't matter which mutual fund you look at. So, when these companies are changed or their contribution is minimized, that's going to obviously affect pension fund investments.

I think there are a lot of people who don't make that connection between the dots, and I think it's a huge one and we need to be discussing it in a very, very transparent way. So, that's a suggestion.

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I urge your serious consideration of today's speakers, those who are incensed by complacency and the inertia of devastating policies. And the book Chernobyl and the film Gasland 2 by Josh Fox elucidates the relationship between energy and human health and safety and welfare.

Some of these thankfully have been mentioned today. Please note my objection to the following points: Hazardous fracking waste emissions, air pollution emissions, fouling environmental habitats with radioactive storage facility leaks.

Two, preservation of tree canopy. I must say that I'm an architect and my undergraduate work in the field was in landscape architecture. So, preservation of tree canopy by reducing, rather than increasing, building, health and life competition and residential technologies.

I think that's a really huge issue that is starting to go to the courts. And we need to, as a

general public, we need to think about it and have plenty of time to think about what it means and what we can do about it and where our values lie.

The use of excessive road salt and the publicized contemplation of substituting brine for this, which was on Main Street Radio. I heard it twice already. How will we be protected from the disposal of fracking waste and other unregulated products and their subsequent contamination of the water table?

Four, allowing vehicles that have gas efficiency rates less than 32 to 70 miles per gallon is due to destruction and inertia. My own passenger vehicle operated at 32 miles per gallon back in 1979.

I studied solar energy construction and passive heating as early as 1974 from government informational brochures. The kind that were sent out for free or used to.

I won't age myself. I was very young when I studied these things. And after receiving my professional education in landscape architecture and preservation, and current construction, it has become readily apparent.

Last point is, five, the downward spiral

exemplified by proliferating HVAC systems, windowless rooms and electrically dependent building configurations, rather than employing age old proven high quality, in conjunction with improved understanding. I'm talking about building technique and building siting.

The present design parameters incorporated in our building code are predicated on our disproven fantasies and industry propaganda of clean affordable energy production. Self determination might include incentives and commendations and recognition for independent, off grid solutions publicized as news. These exemplary achievements might occupy television time to the same extent the down power lines and gas shortages do. The need for obfuscation and misrepresentation might thereby be greatly reduced.

And I thank you for your patience and for, again, allowing everyone to meet here and hear each other. I think it's been good for myself. I can say that. I hope it's been good for everybody else.

Thank you very much.

CHAIRMAN RHODES: Thank you for your patience.

May I just check now for the six folks:

Laurie Heinitz, Robert Heintz, Judy Beck, Phillip Healy,

Tim Reilly, Corey Tyler.

(There was no response.)

Then if there are no further speakers, thanks from all of us to Farmingdale State College, and thanks from us on the State Energy Planning Board to all the commentators. You made excellent points, you made them passionately, and you have given us much to think about.

We have undertaken the development of the Draft SEP with a great deal of seriousness. We will continue to do that as we move to the Final State Energy Plan, and it's extremely important that we hear and understand comments and questions like yours.

Final commercial. Please remember that written comments can be submitted to our website until April 30th, www.energyplan.ny.gov. The session is adjourned. Thank you very much.

(Meeting concluded at 4:58 p.m.)

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1	<u>CERTIFICATION</u>				
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3					
4	I, Jeanne O'Connell, Registered Professional				
5	Reporter and Notary Public in and for the State of New				
6	York, do hereby certify that the foregoing to be a true				
7	and accurate transcription of the stenographic notes as				
8	taken by me of the aforesaid proceedings.				
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