NEW YORK STATE ENERGY PLAN HEARING SYRACUSE, NEW YORK MARCH 6, 2014 HELDAT: SUNY College of Environmental Science and Forestry 1 Forestry Drive Syracuse, New York March 6, 2014 APPEARANCES: JOHN RHODES, Chair, Energy Planning Board/NYSERDA JAMES BAY, NYS Department of Agriculture & Markets JARED SNYDER, NYS Department of Environmental Conservation MICHAEL SNYDER, NYS Department of State Lisa M. Miranda, Court Reporter.

1 MR. RHODES: Good morning and welcome. 2 My name is John Rhodes and I am the president 3 and CEO of the New York State Energy Research 4 and Development Authority and here today in my 5 role as chair of the state energy planning 6 board.

7 I would like to introduce to you the other representatives of the planning board that are 8 9 here today. James Bays, First Deputy 10 Commissioner of the Department of Agriculture 11 and Markets. And Michael Snyder, Policy 12 Analyst, Department of State. We expect to be 13 joined by Jared Snyder, Assistant Commissioner, Department of Environmental Conservation. 14

15 This is a hearing to accept public 16 comments on the 2014 draft State Energy Plan 17 that was approved by the State Energy Planning 18 Board on January 7, 2014 and made available on 19 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 this public hearing were published in the state register on January 29.

25 The draft state Energy Plan is the result

of many months of serious and thoughtful work
 and envisions an energy system for New York
 State that is clean, flexible, affordable
 resilient and reliable.

It states the initiatives to achieve that 5 6 vision that focus on five areas; improving 7 energy affordability, unleashing the power of private sector finances, providing a more 8 9 resilient and flexible power grid, give 10 customers more control over their energy use 11 and aligning energy innovation market demand. 12 According to the plan it outlines some

13 long-term policy goals, near-term action items 14 that lead toward those and meaningful metrics 15 along the way.

16 The draft plan consists of two volumes. 17 The first volume provides 15 key initiatives to 18 advance the state's energy future. The second 19 volume addresses energy uses, its sources and 20 impacts and provides detailed background that 21 we use to develop the overarching vision and 22 initiatives in the first volume.

This is the last of six public hearing sessions that were planned to receive public comments. And let me just pause here to do

some housekeeping, if I may. The exits are 1 2 assigned as we're to, the bathrooms are out this door (indicating) to the left and down the 3 past the serving counter. Rules for this 4 5 session: The only hard rule is no signs on 6 sticks or poles. Otherwise, if you have signs, 7 please feel free to express your views with those. We would ask as a courtesy that you not 8 obstruct the views of others behind you. And, 9 10 in general, if you have sentiments toward a 11 speaker, I ask that you keep those within 12 bounds. Please express yourselves. I will 13 notice that in prior hearings there has been a 14 supportive clapping, et cetera, in the middle 15 of speaker comments. This actually districted 16 that speaker. It's up to you to do that, but 17 it might be courteous to allow the speaker to 18 get done and then express your support, but 19 it's up to you. So those are the ground rules. 20 We're guests of ESF, of course, and it would be nice if we stayed within bounds of the 21 22 corium. That's actually been how these have 23 all gone. They have been orderly and 24 passionate, and that's exactly as it should be.

25 Written comments, besides oral comments that

already are given today on the draft plan, will 1 2 be accepted through April 30th. And information on the submitting those written 3 comments can be found on the Energy Plan 4 5 website. If you decide to submit written 6 comments, please do so as soon as possible so 7 they can be carefully considered. All comments, whether -- all public comments, 8 9 whether oral or written, will be considered by 10 the Energy Planning Board as it works toward 11 issuance of the final Energy Plan. All 12 comments county equally regardless of how they 13 were received written or at sessions like this. 14 The planning board's targeted issuance of 15 the final plan is in the spring of 2014. 16 The process today is simple. Those who 17 wish to comment at this hearing have been asked 18 to sign in upon arrival, your name will be 19 called one at a time to speak. When your name 20 is called, please come to the podium to provide 21 your statement. I will make a practice of when 22 I announce a name to announce the name of the 23 following speaker or the on-deck person. A 24 court reporter is here to provide a transcript 25 to the planning board of everything that is

said today. It is very important that there be 1 2 only one speaker at a time so that the court reporter can hear. The speaker should address 3 their comments in the direction of the 4 5 microphone. And please make an effort to speak 6 clearly and slowly. It is also very important 7 that those in attendance be courteous to the speaker so that his or her comments can be 8 9 transcribed accurately by the court reporter. 10 If you provide a statement, and have a written 11 version with you, it would be helpful if you 12 could provide that to us either today or 13 following the hearing so that we can provide those to the court reporter to assist in 14 providing the transcript. 15

16 All speakers are asked to focus on issues 17 that pertain to the draft and energy plan orally. Your comments should be as succinct as 18 19 possible so we can hear from as many of you as 20 possible. We've set a five minute deadline for 21 this purpose. But of course after everyone has 22 had a chance to address the board, repeat 23 speakers may be afforded another five minutes 24 should hearing time permit. Formal 25 presentation and Power Points are not being

1 allowed today.

2 Again, our goal is to hear from as many of you as possible. As this is a statement 3 hearing, the planning board is not entertaining 4 5 questions. This is an opportunity for us to 6 receive feedback and hear from you on the draft 7 plan. Those who want to comment, but do not want to speak in public, again, you can submit 8 9 written comments via our website. And, again, that's the energyplan.ny.gov. 10

11 With that, I will note that we've been 12 joined by Jared Snyder, Assistant Commissioner 13 of the Department of Environmental Conservation. I want to thank you all for coming today 14 15 and just ask if there are any questions about 16 the process for this session that I can answer 17 at this time? Seeing none, I will call our 18 first speaker Lawrence Paul to be followed by 19 Sarah Eckel.

AUDIENCE MEMBER: Thank you for very much for having me speak today, I appreciate it. I wish to highlight a major flaw in the draft 2014 New York State Energy Plan. This document fails to seriously address the paramount issue of climate change and the global warming

crisis. Instead of providing a path for 1 2 achieving greenhouse reduction goals, the plan actually promotes an expansion of the natural 3 gas production and consumption as well as 4 construction of additional natural gas 5 6 pipelines and other gas infrastructure that 7 will encourage fracking in other states and possibly here in New York State. This will 8 also increase the level of carbon dioxide and 9 10 methane emissions for decades to come. This is 11 the complete opposite direction that we need to qo. This plan will cause a significant 12 13 increase in the release of methane gas into our 14 atmosphere by the extraction of natural gas 15 from shale, leakages from pipelines, transport 16 vehicles and storage area spills. Not to 17 mention the contamination of our water, air and 18 land from the fracking process. Let us also 19 not forget the danger of liquified natural gas. 20 40 years ago 40 people died in Long Island from 21 an accident in liquified natural gas. Also, we 22 must remember the recent explosion on our rail 23 systems and also the terrible tragedy in 24 Quebec. Methane gas is by far the most potent 25 greenhouse gas of any other fossil fuels. Ιt

is many times the warming effect of carbon 1 2 dioxide. We have well surpassed the safety limit zone of 350 parts per million of carbon 3 concentration in the atmosphere. In the spring 4 of 2012 the carbon dioxide levels reached 400 5 6 parts per million near the Artic region and 7 today we are at that point now. Also, every 8 year this increases two to three parts per million each year. We're getting closer to the 9 10 tipping point to the point of no return in 11 which we'll be facing irreversible climate 12 change. For than a decade we have experienced 13 the direct effect of global warming through 14 extreme weather patterns, rising oceans, 15 melting Artic sea ice, flooding, tornadoes, 16 hurricanes, droughts and fire. And it is 17 getting worse. The New York State Energy Plan 18 needs to be a document that provides an 19 aggressive, bold and innovative plan with a 20 sense of urgency. Urgency that leads us to a 21 significant reduction of emissions in our 22 atmosphere and by banning fracking as well as 23 reducing and phasing out fossil fuel energy for 24 a non-fossil renewable energy resources. Thank 25 vou.

1 MR. RHODES: Thank you very much. Sarah 2 Eckel to be followed by Linda DeStefano. AUDIENCE MEMBER: Thank you for the 3 opportunity to speak today. My name is Sarah 4 Eckel, the legislature and policy director for 5 6 the Citizens Campaign for the Environment which 7 has 80,000 members and is not-for-profit. CCE will offer comprehensive written comments. 8 9 Today I would like to highlight the natural gas 10 outlined in the plan. The Energy Plan said 11 that that's a vision for reducing New York's 12 contribution toward climate change, however 13 throughout the plan the goal is -- are to move 14 from oil to gas. From oil to gas. The plan 15 lays out the expectation that the dependence on 16 the gas will significantly increase. Gas is 17 not sustainable in the area for New York and 18 increases its use toward the work that the 19 state has done to provide public health and 20 energy. Indeed the plan acknowledges the 21 public health impact of oil and coal, but 22 largely ignores those impacts when it comes to 23 gas. A 2012 study on a set of chemicals, 24 non-methane hydrocarbons compounds found in the 25 air that directly said it produces more than 50

NMHC found in natural gas wells in rural 1 2 Colorado including 30 that effect the brain and nervous system. Some detected levels high 3 enough to potentially harm children who are 4 5 exposed to them before birth. The author said 6 this source of chemical is likely a mix of raw 7 gas that's vented from wells and emissions from 8 industrial equipment used during the gas 9 production process. This adds to the concern 10 of how air pollution from gas is effecting 11 public health during all stages of production 12 and delivery. The study author reflected 30 13 NMHC that effect the endocrine system. Several 14 belong to a class called PHA -- I can never say 15 that word without looking it up -- detected 16 what other scientists are found high enough to 17 impact child development. Woman exposed to 18 certain PHA are more likely to have children 19 with lower birth weight and lower IQ scores. 20 In 2013 the Rand corporation provided a study 21 doing air emissions into gas drilling 22 operations in Pennsylvania. They stated weight 23 extraction industry provided the VOC and more 24 emissions equivalent to our larger land. The 25 same air guality provides today 7.2 million to

3.2 million and further stated that 80 percent 1 2 of the damages occurring in the year after the well is developed and more than half the 3 emission damages come from compressor stations. 4 5 These are just two examples of how the gas and 6 impact -- how gas impacts public health through 7 its direct air emissions. The evidence keeps 8 amounting against the gas industry claim that 9 it's a clean fuel. Gas is a dirty fuel just 10 like coal or oil. Pound for pound it has the 11 comparative impact of methane on the climate 12 and is over 20 times greater than carbon 13 dioxide over a hundred year period. Globally over 60 percent of total methane emissions come 14 15 from human activity. In regard to the 16 industry, natural gas and petroleum are more 17 greater sorts of methane emissions in the US. 18 Methane is primarily a component of natural 19 gas. Methane is omitted during the process of 20 storage, transmission and distribution of 21 natural gas. A recent study for the university 22 reports that methane, like from the drilling 23 and production of natural gas, makes the claim 24 it changes the benefit of natural gas 25 specifically in regard to the transportation

sector. The study also concludes there's about 1 2 50 percent more methane in the atmosphere than previously estimated. Additional studies show 3 that methane links have occurred throughout gas 4 5 supply from drilling to compressor stations to transportation. And increase reliance upon 6 7 natural gas doesn't reduce our greenhouse gas emissions. Scientists warn against another 8 9 reliance of natural gas in our electricity 10 system. The electric power sector is the 11 largest contributor to UC global warming 12 emissions and currently account for 13 approximately one third of the nation's total To limit some of the worst 14 emissions. 15 conveyance of climate change, the US tried to 16 cut power sector emissions by 90 percent from 17 current levels by 2050. If New York continues 18 on its current path toward a natural gas 19 dominated electricity system, the electricity 20 sector would generate up to three times the 21 national research counsel's recommended amount 22 of the carbon emissions. Renewable energy 23 sources such as wind and solar generate little 24 to no global warning emissions. And, together with improved efficiency, play an essential 25

role in developing a low carbon electricity 1 2 system. To meet the national research power security, the UC needs to invest heavily in 3 energy efficiency and increase renewable 4 5 energy. Gas is to the climate like building a 6 bridge to warming worlds. As previously 7 discussed, it does not aid in the goal of reducing public health impact from fossil fuel. 8 9 So going from coal to gas or oil to gas is like 10 switching your cigarette brands. This is not 11 the answer New Yorkers need or deserve. And 12 New Yorkers have the opportunity to move away 13 from dirty fossil fuel. And it needs to completely move away from fossil fuels toward 14 15 the sustainable energy future. CCE urges New 16 York State to adopt an energy plan that lays 17 out a clear path toward a sustainable future 18 that is reliant upon renewable energy and does 19 not provide incentives or encourage any 20 transition that New York depends on natural gas 21 or other fossil fuels. And thank you for the 22 opportunity to comment today. 23 MR. RHODES: Thank you very much.

24 Linda DeStefano to be followed by James25 Borra.

AUDIENCE MEMBER: I have three points and 1 2 they're all fairly brief. The first one is the plan is much too reliant on natural gas. Given 3 the methane emissions from natural gas and 4 5 given that methane is a greenhouse gas even 6 more potent than Co2, this plan will not slow 7 climate change. Your previous two speakers 8 talked in great detail, so I won't go onto my 9 second point which has to do with nuclear 10 energy. The plan assumes that nuclear energy 11 should continue to be part of the energy mix. 12 Instead the plan should be looking at how to 13 phase out the nuclear facilities as soon as 14 possible and should be put forward decommission This would minimize the danger to 15 plans. 16 workers and the public as the decommissioning 17 is taking place. The plan does acknowledge 18 that Indian Point may be shut down, but it 19 doesn't deal with the reality of upstate 20 nuclear reactors. I live about 36 miles from 21 three nuclear reactors, and it's a great 22 concern for me. If there were to be a 23 catastrophe there, I don't think there's any 24 efficient way that people are going to be 25 evacuated. At least 20 of the upstate

reactors -- Fitzpatrick owned by Entergy and 1 2 Ginna owned by Constellation -- are very old and in financial trouble. This was pointed out 3 by a financial analyst organization. In the 4 5 case of Fitzpatrick, it seems that Entergy is 6 trying to get the last cent out of the plant 7 while not spending on proper maintenance. For 8 example, the Fitzpatrick plant needs a new 9 condensor, but Entergy shows no sign of 10 installing one. The Energy Plan should include 11 a statement about a over-crowded storage of 12 nuclear waste at the reactors. Let's require 13 that nuclear waste -- some of it is going to be 14 around for hundreds of thousands of years, we 15 have no way of knowing how to keep that away 16 from the environment for that period of time. 17 So we're leaving a horrible legacy to 18 generations to come. The plan should also 19 acknowledge the storage of the nuclear waste at 20 dumps at West Valley near Buffalo and the fact 21 that that has been leaking from a container. 22 The company that started that nuclear dump went 23 bankrupt, left it up to us taxpayers to deal 24 with it. The state government, the federal 25 government for years had been trying to do some

clean up. It is still full of nuclear waste. 1 2 And the Energy Plan, which does not recognize the serious safety public health and 3 environmental contamination problem of one of 4 5 the energy sources, i.e. nuclear, is woefully 6 incomplete. Any my third and final point is 7 that the plan should include a suggestion to fund energy conservation studies and education 8 9 about energy conservation. Energy efficiency 10 is important, but it's distinct from energy 11 conservation. For example, someone might buy 12 an energy efficient refrigerator and then 13 decide they can also buy a freezer because 14 their refrigerator is saving energy, yet the overall result may be more use of energy. 15 16 Clever ad campaigns and programs in schools can 17 encourage energy conservation. And studies can 18 help to determine the best strategy for 19 motivating people. For example, I heard of a 20 study which found people are motivated to save 21 energy when they perceive that their neighbors 22 are doing so, even more than when they think 23 they're going to be saving money, which is an 24 interesting result of that study. More studies 25 can be done more. Education could be done.

Know that Onondaga County has been very good at 1 2 going into a school and educating about recycling with the children. Sometimes the 3 children would come home and educate their 4 5 parents. That same kind of thing can be done 6 on energy issues. Thank you. 7 MR. RHODES: Thank you very much. James Borra to be followed by Keith Schue. 8 9 10 AUDIENCE MEMBER: I want to start out by 11 saying any of my remarks are nothing personal, 12 in case any of you people are involved in the 13 panel otherwise. All these good patient people behind me have brought a lot of data, facts and 14 15 things that I believe our leaders are already 16 aware of. And I think it's sad that they have 17 to come to these kinds of meetings and bring 18 these facts forward as though they're a secret. 19 They're not a secret. There's a root problem. 20 The root problem is business as usual where a 21 board or a governmental agency will craft 22 something that's absolutely not for the public, 23 never was and never was intended to be. That's 24 our group problem. It's the old way of doing

business. That's why we're here today.

We

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have an energy problem because we continue to 1 2 do business the old way. The old way is how we got where we are right now. And we can't 3 continue to do that. It doesn't work. 4 So 5 instead of bringing data and facts, I just try 6 to bring the truth. And truth is we have to 7 change. Our leaders have to change. They have 8 to be responsible and represent the people for 9 a change. Thank you. 10 MR. RHODES: Thank you very much. 11 Keith Schue to be followed by Alicia 12 Alexander. 13 AUDIENCE MEMBER: Good morning. My name is Keith Schue. I live in Cherry Valley, New 14 15 York. I'm here today representing myself as 16 well as the organization Sustainable Otsego. I 17 have a master's degree in engineering and I've 18 worked in the private sector as an electrical 19 engineer for 14 years. I also have been 20 involved in enviromental conservation and 21 government relations. I've served on various 22 federal, state and local advisor boards. I've 23 been directly involved in the review and 24 writing of plans, policies and regulations. As 25 your document admits, we are facing a climate

crisis. Global warming is now upon us. Artic
 ice is melting faster than scientists had even
 predicted. And we are experiencing extreme and
 deadly weather patterns like Hurricane Sandy.
 Addressing this crisis requires an energy plan
 with teeth. Respectfully, we don't have that
 here.

8 Volume one contains facts and words from 9 people like Albert Einstein, Thomas Edison, 10 Nikola Tesla and Rachel Carson. It also 11 contains some bold-sounding initiatives, but 12 they're really only conceptual.

13 Volume two contains data, lots of data, 14 some of which is probably accurate and some of 15 which I do believe is questionable. But in 16 reading this as a whole I found myself asking 17 where is volume three? Where is a volume three 18 that takes some of the visionary concepts of 19 volume one, compares it with information of 20 volume two and creates an actual plan for what 21 you're going to do and how you're going to do 22 it? Nowhere in this document is anything said 23 about the actual percentage of energy that will 24 come from difference sources. What is an 25 intended target for renewables and what time

frame? You do not have a plan unless you make 1 2 some decisions about those things and unless you include some analysis of what facilities 3 will be needed, what facilities will be phased 4 5 out and what other grid improvements you're 6 going to start to do to achieve that. We're 7 concerned that this plan relies much too heavily on passive forecasts made in the 8 9 absence of planning. Significant advances have 10 been made in wind and solar technology, 11 however, the forecast in this plan predict 12 almost no growth to renewables. By putting 13 dubious forecasts before planning, you're 14 essentially creating a self-fulfilling 15 prophecy. A vision of the future very 16 different from the beautiful photographs of 17 wind turbines and solar farms that are in the 18 document.

For this plan to have meaning, we believe it must set an aggressive numerical target for renewable energy with 50 percent of all powered generation from renewables by the year 2025.

23 Going further, the document should have an 24 action plan for continued investments in 25 renewables so that New York State can become

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fossil fuel free by the mid-century.

2 2050 is also when the promise is made in executive order Number 24 by Governor Paterson 3 comes due for reducing total greenhouse gas 4 5 emissions across all sectors by 80 percent. 6 Although the Energy Plan mentions that goal, it 7 fails to lay out ny strategy for how it's going to be accomplished. Instead it invents a 8 substitute interim target for 2030 for reducing 9 10 one greenhouse gas, which is carbon dioxide. 11 Well, this completely ignores methane, the main 12 ingredient of natural gas which, according to 13 the intergovernmental panel on climate change, is 33 times worse than CO2 as the driver of 14 climate change over a hundred years and 86 15 16 times worse over 20 years.

17 By the way, the next 20 years are actually 18 the critical time when scientists tell us that 19 decisive action must occur to avoid the worst 20 impact of climate change. We don't have a 21 hundred years to solve this problem. Instead 22 of cherry-picking targets, which favor the 23 natural gas industry, a credible schedule 24 should be developed with a series of numeric 25 benchmarks at regular intervals for the

reduction of a total greenhouse gas emission,
 including benchmarks within the time frame of
 this administration. I think we all know it's
 easy to make promises while on somebody else's
 watch.

6 We're also very concerned that this plan 7 places caps on the potential benefits of renewable and efficiency programs. If NYSERDA 8 9 is saying the best we can hope for is that 37 percent of New York's energy needs to be met 10 11 with renewables, the most energy we will be 12 able to save from energy efficiency 13 improvements is only 20 percent, than, frankly, 14 you're basically conceding that your 80 percent 15 total greenhouse gas reduction goal is 16 impossible. The numbers don't add up. We are 17 deeply concerned that instead of focusing on 18 renewables, that plan sets a course for even 19 greater dependency on fossil fuels, especially 20 natural gas. Three of the plan's initiatives 21 Numbers 6, 8, 9 explicitly promote conversion 22 to gas and acceleration of gas infrastructure 23 for transmission and distribution. And many of 24 your initiatives ambiguously refer to clean 25 That is without saving what you're energy.

actually talking about. Let's make this very 1 2 clear: Natural gas is not clean. When you perform a life-cycle analysis of impacts, 3 meaning how you get gas out of the ground, 4 5 fracking, air and water contamination, disposal 6 of frack waste water and methane leaks that 7 occur in processing, transmission, storage and distribution. We know that natural gas, when 8 9 you put all that together, fracked gas, it's 10 not clean. If Governor's Cuomo green bank is 11 going to be used to promote the consumption of 12 fracked gas and the building of gas 13 infrastructure, then it's not a green bank. 14 Finally, what this plans says about the 15 possibility of fracking here in New York is 16 truly puzzling. The section titled New York 17 Production Forecast begins with a statement 18 saying that natural gas production levels are expected to continue dropping. However, this 19 20 is immediately followed with words and a chart 21 that forecasts them actually to rise. In fact, 22 tripling with the lifting of today's 23 moratorium. So literally the document 24 contradicts itself all on the same page. 25 Hopefully Govenour Cuomo will make the right

decision and not permit fracking in New York. 1 2 But even if that happens, even if he makes the decision by embracing a plan that welcomes 3 fracked gas from outside, then we are still 4 5 polluting the environment, contributing to 6 climate change and making the problem worse. 7 I'm just about done. I hope you agree with me New York can do 8 9 better. We must do better. We urge you to put 10 forward a plan with more teeth and less gas. A 11 plan with specific measurable targets and 12 specific meaningful action that will build a 13 sustainable future based not on fossil fuel, that will one day be gone, but instead on 14 15 renewables. That is the only path that will 16 truly lead us to energy independence as a state 17 and as a nation. Thank you very much. 18 MR. RHODES: Thank you very much. 19 Alicia Alexander followed by Nancy Norton. 20 AUDIENCE MEMBER: Thank you all who have 21 presented before me for your beautiful 22 well-thought out comments. And thank you the 23 board and panel for listening to our concerns. 24 My name is Alicia Alexander and I'm with the

Grassroots Accommodations Coalition for energy

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Sustainability. We are the welcome committee 1 2 for the world here in New York. We have great 3 food, we have great water, yes. We would like to keep it that way. As an accommodations 4 5 owner who sees people from pretty much every 6 country around the world, they love to see 7 Upstate New York, they love to see our great citv. And we would like to -- we would like to 8 9 continually provide that. We don't want wells, 10 we don't want polluted water. Less than 11 one percent of all the water on this planet, 12 less than one percent of all the water on this 13 planet, is drinkable. While much of this globe 14 is experiencing drought, and worse vying for water, which New York is so rich in great 15 16 lakes, Finger Lakes, Catskills and Adirondacks. 17 We have a very precious irreplaceable 18 commodity. To exchange our precious water for 19 polluted, fracked and poisoned water does not 20 just border on insane, it is the very 21 definition. This is an irreplaceable commodity 22 needed by every living organism on the planet. 23 Not just us. And it is in excusable to play 24 with that. We have already, due to the great 25 minds and the great energy that have gone into

this Stanford report, we have already at least 1 2 a decent plan. Don't tell me it isn't possible. Iceland, Germany, Spain, Portugal, 3 Denmark. We in America used to be leaders. 4 New York State was the first to hold the world 5 6 fair. We are not leaders anymore and we need 7 We need to be leaders. And Govenour to be. Cuomo needs to step up to the plate, as we all 8 9 do, and become leaders in a world that is so 10 damage by greed rather than by sense. Dollars 11 rather than by sense. And I ask you all, you 12 all, to think about all the words you're 13 hearing here today and make a decision that works and that's blessed by God. 14 15 MR. RHODES: Thank you. 16 Nancy Norton to be followed by Melissa 17 Chipman. Can I just one second ask for all of us to 18 check our cellphones that they're off? 19 20 AUDIENCE MEMBER: I'm also a vacation 21 rental owner and I hear from people all over 22 the world about what a fantastic place we live 23 in. And I really appreciate that we've been 24 given this. Thank you for your work on this and for your attention to these issues. 25

NYSERDA had helped my family finance solar 1 2 panels for our house, do heat audits, home audits, energy audits, business energy audits. 3 The federal government has helped us to -- with 4 5 tax rebates to get two electric cars. So with 6 our solar panels we don't buy gasoline anymore, 7 unless we come up to -- up to Syracuse or 8 travel. And I would like to see more charging 9 stations along the way. We would love to have 10 been able to park and charge my car while I 11 parked here. I'm also representing many, many 12 friends and family who were unable to come 13 today. I hope that Mr. Bays will continue to 14 advocate for Upstate New York agriculture and 15 tourism economy. Fracking would devastate it. 16 The people who care about the organic foods 17 that they're able to buy in New York City 18 because our producers bring them down there 19 would not be interested if we were suddenly 20 like Pennsylvania and had to worry about our 21 cows and our calves dying because they're being 22 exposed to fracking. I'm concerned that my 23 business would suffer very much. I'm not sure 24 how much you guys address building codes. My 25 husband and I like to travel. We go around the

world. We see houses all over the place with 1 2 solar hot water heaters on the roofs. I've never seen them here. Our building codes 3 should be reflecting the needs for our 4 5 grandchildren to have a healthy place to live. 6 I have a five-year-old -- she's 7 seven-years-old, granddaughter and a two-year-old grandson, I have a 20-year-old 8 9 daughter, I would love to see my daughter have 10 children, but I can't. To me, it feels like 11 being Jewish in Germany in 1933 that I wouldn't 12 want my kids to have kids. I don't know what 13 life will be like for them in a hundred years for their children. I've heard from a New 14 15 Yorker they're looking at potential things 16 going on as they are having sterilization in 17 150 years. I can't imagine what that means for 18 life going forward. I recently read a book by 19 Derek Bunhofter and have a quote from him, 20 which I won't be able to give you exactly. Walk the right direction on a train that is 21 22 speeding the wrong direction doesn't really do 23 any good. We have changed to heat pumps at 24 home, we have 28,000 watts of solar power, we 25 have electric cars, I don't use my gas dryer, I

hang my clothes, I use an electric dryer. We 1 2 do everything we can. I don't buy plastics, I make my own soap. I mean my life is just the 3 way of trying to make this world better in 4 5 reducing my impact. Sometimes it's a little 6 over-the-top, but... I don't want to be 7 walking the wrong direction on a train that is speeding toward extinction. So I hope, even 8 9 though I may not have addressed your point 10 directly, that you hear not just my voice but 11 the voices of the many people who I've talked 12 to about this who have shared these concerns 13 and that you will work on making the best program. You cannot listen to the fossil fuels 14 15 and money special interests, but listen to the 16 actual citizens of this area who care about our 17 world going to be a better place. Thank you. 18 MR. RHODES: Thank you very much. 19 Melissa Chipman followed by Judy Pierpont. 20 AUDIENCE MEMBER: Greetings everyone. My 21 name is Melissa Chipman and I live in Hector, 22 New York on Seneca Lake, and it's very near the 23 opposed gas storage facility for the whole 24 Northeast. And I'm a part of Gas Free Seneca. 25 I'm very opposed to storing gas in my

neighborhood. I also want to talk about 1 2 dollars and sense. Not c-e-n-t-s, but s-e-n-s-e. Could you consider doing an audit 3 and figure out how much it would cost to go 4 5 fully renewable with solar panels and 6 geothermal and wind energy and drop this 7 other -- drop using money to continue down on the train on the wrong track going down the 8 9 wrong direction going toward our extinction? 10 Do an audit of how much it would cost to go 11 fully renewable versus how much it's going to 12 cost to stay with natural gas. How much is it 13 going to cost for all explosions and all 14 disasters that are going to come done the line? 15 We know this could happen. Every day I have a 16 friend who tracks it on the Internet. She 17 checks, she checks Canada, she checks the UK, 18 she checks all over the United States. Every 19 day there's an explosion of natural gas. So I 20 would just ask that you would please consider 21 doing an audit and consider comparing the cost. 22 We just need to stop doing the insanity that 23 we're doing and figure out it's going to cost 24 about the same. Thank you.

25 MR. RHODES: Thank you very much.

Judy Pierpont followed by Sara Hess. 1 2 AUDIENCE MEMBER: I'm Judy Pierpont from Dryden, New York and I want to thank you for 3 entertaining our comments today and for all the 4 5 inspiring comments that I've heard so far 6 today. The Draft Energy Plan has no growth to 7 alleviate substantial reduction of greenhouse 8 gasses. It's not necessary in the global 9 effort to avoid a shift in our climate, which 10 are the last thing I -- I mean we have storms, 11 floods, droughts, fires, unstable and 12 particularly an air current pattern, we're 13 right now enduring the polar vortex, right, 14 which is some unusual shift in air patterning 15 and rising sea levels. On Page 296, volume one 16 of the draft plan, it says that it's the 17 intention of New York, quote, to "reduce the 18 intensity of its carbon emissions from the energy sector by 50 percent by 2030 measured in 19 20 carbon dioxide emissions per state from the 21 2010 baseline. Putting New York on the pathway 22 to achieve an 80 percent reduction in total 23 emissions by 2050." Sadly, this claim doesn't 24 provide an accurate accounting of greenhouse 25 gas emissions that play a significant part in

climate change. The reduction -- the reduction 1 2 in total emissions refer only to carbon dioxide avoiding the fact that greenhouse gas emissions 3 do not consist solely of carbon dioxide. The 4 5 claims seem to actually ignore the effect of 6 unburned methane emissions on the climate. I 7 really do not understand how in a supposedly science based document knowledge of the effect 8 9 of methane can have a been is cyst that moat I 10 can down made. It's known that it's -- that it 11 is a more potent greenhouse gas than carbon 12 dioxide. As many have said 86 times over 20 13 years. That's important. 20 years. Ιt 14 appears that in the interest of promoting 15 accelerated natural gas use, the plan makers 16 simply chose to leave it to the old belief to 17 those within the natural gas industry that 18 since natural gas burning, with less carbon dioxide emissions, it therefore contribute less 19 20 than greenhouse gasses to the atmosphere. It 21 is so hard to move people who want to believe 22 something off of their position no matter how 23 much good science is produced. So it's 24 alarming to me that while touting, quote, "Aggressive environmental goals," unquote, the 25

plan advocates increased investment in a 1 2 methane driven economy. Methane is a potent greenhouse gas untolerable at every stage. 3 Every stage, drilling, transporting, 4 5 compressing and consumption of natural gas 6 contributes to greenhouse gas air pollution. 7 Let's look a bit at some recent studies. Ιf the plan had not integrated the more recent 8 9 science into it, it must do so in order not to 10 set the state on a path to greenhouse gas 11 generation at 2.7 percent or more leakage. 12 Natural gas loses any advantage over coal in 13 terms of its greenhouse gas effect, while the 14 potential gas leakage from production at 15 1.35 percent. It tends to rely on industry 16 provided numbers. A separate study by 15 17 scientists from institutions including Harvard 18 and the Natural Atmospheric Administration and 19 Lawrence Burnley National Lab looked at 20 comprehensive atmospheric audits that included the leakage at least three percent over the 21 22 levels at which natural gas would provide any 23 climate benefits from its lower carbon dioxide 24 level when burned. The title of this study is 25 the emission of methane in the United States.

It is based on comprehensive atmospheric 1 2 methane observations. Rather than an industry provided numbers EPA uses, the find willing in 3 this comprehensive study are backed up by other 4 more local studies which found four percent 5 6 leakage rates in natural gas production around 7 tender, a 6 to 12 percent leakage percent rate from a production in Colorado. The science of 8 climate change and greenhouse gas emissions is 9 10 moving fast. It behooves an energy planner of 11 New York to adjust predictions and projection 12 to New York. In this case it doesn't make 13 sense. Natural gas use, when it's used, will 14 lead to greater greenhouse gas emissions and 15 move New York further away from meeting its 16 greenhouse gas emission goals. 17 Thank you very much. 18 MR. RHODES: Thank you very much. Sara 19 Hess to be followed by Joe Wilson. 20 AUDIENCE MEMBER: My name is Sara Hess. 21 I'm from Tompkins County. And I've been 22 studying energy policies and climate change for 23 the past five years. I will only address one

25 pleased that the draft Energy Plan adopted the

point here and other points in writing. I'm

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long-term goals set by Govenour Paterson of 1 2 reducing greenhouse gasses by 80 percent from the 1990 levels in the year -- by the year 3 2050. That may be the best single element in 4 5 the plan. But this draft is far from a real 6 climate action plan. The authors must now 7 finish their job by filling in links between the 15 initiatives and short-term concrete 8 9 action, funding and other resources, to pull 10 out timelines and a process of benchmarking to 11 get the results along the way. I was a planner 12 in my professional life and I know what a plan 13 should be. This draft has not yet met the 14 definition of a plan in my point of view. And 15 that's a -- it's the greatest weakness. I have 16 also written a lot of grant proposal. If I had 17 written this one, believe me, it would not be 18 funded. Without writing and committing to the 19 concrete steps to make the 80 by '50 goal, I 20 believe year by year this plan leaks 21 credibility. By contrast, the solution project 22 by Mark Jacobson brought a dozen of scientists 23 together to study and then outline one way that 24 a transition of wind, water and solar could be achieved by 2050. Obviously there are many, 25

many ways. This is very hypothetical when 1 2 talking about the long-range. But I can't help but wonder the -- what this -- where this plan 3 or at least elements of it were not 4 5 incorporated or used by the authors. Maybe it 6 was, but it's not obvious. A better New York 7 plan would also address how reliance on natural 8 gas, oil and nuclear will be reduced year by 9 year. Instead, this plan seems to focus on the 10 business as usual projection that ramp up 11 fossil fuels and continue nuclear. The long 12 impression is that this really is a business as 13 usual plan. I don't think that was your 14 intention, but that's the way we are reading 15 it. Every day I feel the urgency of climate 16 change motivating me to become a more informed 17 and a more active responsible citizen of our 18 state and of our globe. I urge you, as 19 representatives of our state government, to set 20 more aggressive efficiency and renewable energy 21 goals immediately to be met this year and in 22 2015 and then 2016 and to create the real plan 23 to meet those goals every year that this goal 24 of 80 by '50 from now until 2050. So please 25 finish the work that you began and write a true

plan that we can believe in. Thank you. 1 2 MR. RHODES: Thank you very much. Joe Wilson to be followed by Janna Watkin. 3 AUDIENCE MEMBER: Good morning and thank 4 5 you for taking your time to listen to us 6 discuss the Draft Energy Plan. My name is Joe 7 Wilson and I live in the Town of Dryden. Some of you have heard about the town of Dryden. 8 We 9 are currently being sued by bankrupt 10 multi-national corporation to overturn our 11 citizen generated ban on hydro fracking. It's 12 not fun to be the victim of a bankrupt 13 multi-national energy driven company, but here 14 we are. I also hold three graduate degrees, 15 although I'm now retired. I'm a recovering 16 lawyer, I'm a recovering public administrator, 17 I'm a recovering elected official and I'm a 18 recovering businessman. Amongst the positions 19 I held was a director of planning and 20 coordinator for the State of Delaware, I served 21 for Govenour Mike Castle and his cabinet. 22 Behind closed doors in that cabinet room we 23 would have looked at this plan and said it's a 24 great puff piece, but it ain't no plan. There 25 are many, many new independent plans, most of

which you have heard about, all right. 1 I'm 2 simply going to highlight some again because they're important for you to hear again and 3 again with the presumption that then you will 4 5 go back or your staff will go back and rewrite 6 the plan to make it an appropriate one. Number 7 one, the plan calls for a greatly increaed use of natural gas, also known as methane, and a 8 9 massive increase in methane infrastructure. 10 Those proposals -- and I will not go into 11 detail -- will not enable the state to meet the 12 goals that it holds for the mitigation or 13 reduction of greenhouse gasses. Number two, 14 the methane life-cycle produces major chemicals 15 including diesel fumes, smog, produce fuels, 16 cancer causing carcinogens and birth defect 17 producing endocrine disruptors. However, 18 there's nothing in this plan that I could find 19 either by way of regulations or intensity that 20 would cause the corporations that are going to 21 be reducing those gasses to reduce their 22 emissions. Number three, because the authors 23 of the plan do not mention or take into account 24 the negative health effects of the methane 25 life-cycle, implementing this plan will worsen,

not improve the health of the -- us residents 1 2 of this state. Number four, methane, as we've heard over and again -- and I will say this 3 again because it's important to know -- when 4 it's in the air, it's 86 times greater than the 5 6 heat trapping global warming gas than carbon 7 dioxide. Yet the authors of this plan did not mention these facts, ignored these facts and do 8 9 not take them into account in any way that 10 might either lessen or mitigate global warming 11 or improve our health. Number five, such jobs 12 as are generated by methane extraction and 13 infrastructure are shortlived. In general, the 14 production and use of fossil fuels, including 15 methane, requires lots of money but very few 16 people, therefore relying on this diminishes 17 and increases polluting. An unhealthy approach 18 to the generation of energy through fossil 19 fuels will not improve our economy. In fact, 20 we know that the process of extraction, 21 transportation, distribution and burning of 22 methane in particular will push out the many 23 traditional businesses and industries they 24 currently rely on. Especially in upstate which 25 is targeted for fossil fuel extraction. In

short, implementing this plan will dramatically
 increase our reliance on methane and methane
 infrastructure and methane production. And
 methane infrastructure will do far more harm
 than it will ever do good for those citizens of
 New York. Thank you.

7 MR. RHODES: Thank you very much. Janna
8 Watkins. On deck is Linda Griggs.

9 AUDIENCE MEMBER: Hi. My name is Janna Watkins and I'm the executive director of New 10 11 York Interfaith Power and Light. And I'm here 12 to offer a perspective from the faith community 13 on the energy plan. My organization, 14 Interfaith Power and Light, is a faith based 15 non-profit organization that organizes a 16 religious response to climate change. I 17 appreciate your time. We're an interfaith 18 organization of members from Judaism, Buddhists 19 and there's a whole list on other faith 20 tenants, all the major faiths. New York 21 Interfaith Power and Light is a national group. 22 We have over 40 states in our organization and 23 130 members state-wide. In order to address 24 the urgency of climate change, the energy plan 25 must go further take our state away from fossil

fuels and grid power toward renewable energy. 1 2 The plans must call for mandatory energy fossil fuels that will meet the state's goal of 3 reducing carbon dioxide 80 percent after 2050 4 5 and at least 50 percent of New York's 6 electricity come from renewable sources by 7 2025. We cannot allow fracking for our overall health And like from fracking emits greenhouse 8 9 gases which is worse on our lives. You have 10 your time and an opportunity to rise to the 11 occasion and do something about the issues that 12 effect all life on the planet and we can become 13 heroes or we can chose to hide our heads in the 14 sand and then we'll have to face the question from our children why didn't we address the 15 16 problem when there was still time. Thank you. 17 MR. RHODES: Thank you very much. Linda 18 Griggs followed by Ellen Harrison. Is Linda 19 Griggs here? We'll come back to her. 20 Ellen Harrison to be followed by Marion

21 Karl.

AUDIENCE MEMBER: Good morning. Thank you all for being here and listening to us. And I look forward to seeing a revision on the plan that hopefully will encourage a lot of these

comments. This plan needs to be revised so 1 2 that as others have said through goals that become specific plans with measurable outcomes. 3 We need a plan that charts a course away from 4 fossil fuels and toward energy efficiency and 5 6 renewables toward a distributed production 7 network. All of the ways that fossil fuels are obtained are an environmental disaster through 8 9 air, water, they disturb the habitat. They 10 offer destruction of a community. And many of 11 us that were sort of vaguely aware of this 12 became much more concerned and much more aware 13 as we've seen the impact of hydraulic 14 fracturing in neighboring Pennsylvania and aware of impacts elsewhere. I want to applaud 15 16 New York State, our governor and the previous 17 governor, and at this time the DEC and the 18 State Health Department for being cautious when 19 it comes to fracking and not buying into the 20 What we are seeing is a tremendous command. increase in the knowledge of what kind of 21 22 impact that type of fossil fuels develop is 23 having on health, on the environment and on the 24 climate. It's part of an effort that an 25 organization called physician scientists and

engineers for healthy energy put together a 1 2 biography of just peer reviewed articles. There are lot of reports and lots of other 3 kinds of information, but as scientists, and my 4 5 background is in science, we understand that 6 the power renew process it's not perfect but 7 it's the best we've got for a way of insuring that that is published as it at least has been 8 9 subject to some kind of scrutiny. It's not 10 just hype. Two biographies, which I would urge 11 you to take a look at, they're -- it's focus is 12 primarily health and enviromental issues in 13 this case related to energy extraction and use. In the last biograph it currently has 240 such 14 15 peer reviewed articles. It's very specific. 16 And what we found was more than half of the 17 articles have been published in the last year, so there were no health studies a bunch of 18 19 years ago. Now they're coming rapidly. And so 20 I am really admiring the fact that New York 21 State has health out there and we're going to 22 be the beneficiary of such information. I am 23 hoping that it will go from a moratorium to a 24 ban on fracking in New York State. We learned 25 how dangerous this practice is. So while we're

not fracking in New York, we are experiencing 1 2 and will be experiencing more of the impacts of natural gas development. What we're seeing are 3 a lot of pipelines being built. As somebody 4 said earlier, those all have leaks. 5 6 Compression stations are part of the whole 7 process. Those compression stations are significant sources of air emissions. 8 In 9 addition, of course they're going to lead to 10 exports which is going to lead to price 11 increase. But that's another issue. We also 12 are seeing waste coming in from Pennsylvania. 13 And I only will be surprised if we begin to see 14 waste from elsewhere. So this gas, we must not 15 allow this plan to provide gas. There are too 16 many negative impacts. If you want to see that 17 biography I mentioned, it's the 18 PSEhealthyenvironment.org and then there's a 19 place to click down below. So I also think 20 that the plan needs to promote distributed 21 generation. Having become aware of the impact 22 of energy development else where, we installed 23 a geothermal at our house, I rode here in an 24 electric car and we're planning solar to be 25 installed this spring. But one of the things

we just learned was that the rebate incentive 1 2 from NYSERDA has been cut significantly. Now I think we're wealthy enough, we'll go ahead and 3 do it anyway. But I'm confused. That's going 4 5 in the wrong direction. This plan needs to be 6 very specific about how New York will increase 7 the use of renewable through things like 8 education and rebates and ways that we can 9 overcome anymore by which happens in the 10 renewable field. But we need to go ahead. 11 Thank you. 12 MR. RHODES: Thank you very much. Marion 13 Karl followed by Claire Howard. 14 AUDIENCE MEMBER: My name is Marion Karl 15 and I live in -- I want to thank you for being 16 here today and also to NYSERDA who helped me 17 with an energy audit in my house, an 18 implementation of a heat pump which has helped 19 me cut back significantly on my use of fuel oil 20 this very cold winter. I also live in the town 21 of Middlefield, which is another one of those 22 towns that was challenged by the gas company 23 for their industrial development. We stood for 24 two challenges but face another challenge

25 coming up in the Court of Appeals later this

year. Many people have spoken about things 1 2 about this plan that they don't find satisfactory and reiterating that's it not a 3 good thing because it means that it's all very 4 5 important. But I want to mention just a couple 6 of other things as well. The transportation 7 goals are vague and misleading and not supported by science. The draft plan promotes 8 vehicle diversity and places at New York clean 9 10 fleet initiative, not limited to electric 11 vehicles. However, this program provides 12 public money to help purchase vehicles that run 13 on compressed or liquid natural gas. New science has shown that natural gas is actually 14 15 worse for the climate than the traditional 16 fuels like diesel due to methane in the supply 17 Further, the draft plan offers no chain. 18 detail about how Ne York will implement a 19 memorandum of understanding as seen with seven 20 other states to put 3.3 million emission 21 vehicles on the road by 2025. Rather than 22 encourage vehicles that run on climate killing 23 fossil fuels, New York should establish 24 specific targets to advance to electrical 25 vehicles and hydrogen fuels. And my second

point is that the plan ignores security and 1 2 terrorism concerns. Although the draft plan discusses a sector for nuclear power, it 3 essentially ignores the vulnerability of 4 5 natural gas infrastructure such as processing and storage facilities, pipelines, compressor 6 7 stations and distribution systems to attack. A 8 2008 congressional record titled liquified 9 natural gas infrastructure security found that 10 LNG infrastructure is inherently a hazardous 11 and potentially attractive to terrorism. And 12 in 2013 and LNG plant was targeted by Al Qaeda. 13 If gas infrastructure grows in New York, as 14 proposed by the draft plan, those dangers will grow as well and has not been addressed at all. 15 16 Thank you very much for taking my comments. 17 MR. RHODES: Thank you very much. Claire 18 Howard to be followed by Julia Walsh.

19 AUDIENCE MEMBER: Good afternoon. And 20 thank you all for being here with us today. My 21 name is Claire Howard. I come from the village 22 of Skaneateles that's just down the road. It's 23 eastern most Finger Lakes. I've lived there 24 most of my life. I'm 63-years-old, I was born 25 in 1950. But by the time benchmarks that are

made reference to in this plan come to pass, I 1 2 may not be on the planet. In 2050 most of us in this room may not be here. So I don't speak 3 for myself, I speak for my children, my 4 5 grandchildren, your children, your 6 grandchildren and our great-grandchildren. The 7 seven generations as the Native American guides tell us. If you can imagine this room 8 9 multiplied by many, many times and each seat 10 filled with one of our generations to come, a 11 child, a grandchild, a great-grandchild. What 12 we're planning for with this plan is for the 13 future generation. Not for us, but for the 14 future generation. So I hope that you listen 15 to all the scientifical data that has been 16 portrayed today. I don't have a prepared 17 statement, I don't have facts and figures. Ι 18 just simply say that we put aside personal 19 agenda, politics, business as usual and that we 20 think creatively, that we think with a vision, 21 that we honor what we have learned. We have 22 clear, clean water to drink, good food to eat, 23 a stable climate to live in. Our children may 24 not have that unless we plan, starting with 25 this plan, to make their future one that's as

good as what we have had. So thank you very
 much and good luck with the next version.
 MR. RHODES: Thank you very much. Julia
 Walsh. And may I just check if Linda Griggs

5 has returned to the room? After Julia Walsh6 we'll have Reverend Nancy Kasper.

7 AUDIENCE MEMBER: I'm the founder and director of 4 Fracking Action. We're a member 8 organization of New Yorkers which is over 200 9 10 organizations across the state over a thousand 11 businesses and 300 faith leaders state-wide. 12 We will be submitting technical comments. I 13 want to start by acknowledging the work that 14 was done to produce this document. The many 15 hours and revisions, the dramatic shift over 16 the past few years by the administration that 17 one that appears to be a rush to now which is 18 as listening to this science. And the 19 scientific studies and evidence overwhelmingly 20 shows that fracking in inherent unsafe and it's 21 poisoning water and air and land across the 22 great country and make Americans sick. And 23 with this document, the process shows we 24 clearly have a long way to go. As you can tell 25 from being here at these public hearings, and

to your credit, Mr. Rhodes, it's great that 1 2 you're here in person, the people of the great state care about New York State's Energy Plan 3 and future. I can sincerely say that we wanted 4 5 these to be a more accessible process, which 6 unfortunately is was not. Lastly, in a local 7 citizen organized forum on the Energy Plan with two experts, over a hundred people turned out 8 9 to their local library that had adequate 10 parking, handicapped accessible and was in the 11 evening after work, a spirited two hour dialogue discussion took place. That is what 12 13 we wanted the Energy Plan process to be like. 14 Instead, the hearings have been hard to access 15 and happen during the workday. I literally 16 risked my life to attend the first hearing in 17 Albany driving from New Paultz in bad weather 18 and passing car accidents on the way up only to 19 find an equally bad parking situation. 20 Syracuse isn't that much different. I was just 21 parking before I had to stop and park in order

to drive an elderly woman to the steps of this building, and that's just simply unacceptable. We need more hearings across the state that are easily accessible to the public between now and

the end of April. We also need the missing 1 2 documents that are the foundation of the Draft Energy Plan. The study on renewable energy 3 efficiency potentials and the greenhouse gas 4 inventory. It is obvious, just to those of who 5 6 are closely paying attention to the details, 7 that -- and there are many of us -- that the plan was rushed politically. Instead of 8 9 pushing back into those studies that were 10 critical to be included in the completed form 11 with the draft plan, they were not. And so now 12 that you have literally been caught empty 13 handed for the third time today in a public 14 letter that colleague generated to give us the 15 missing studies both on the sustainable 16 renewable and energy efficiency potential and 17 the greenhouse gas inventory. I request that 18 you release these documents and an extended 19 comment period and new public hearings for the 20 citizens of the state. And before we have to 21 demand it again publicly through another public 22 sign-on letter with a dozen organizations, we 23 would much rather prefer to work with you 24 rather than to have to advocate over and over 25 again for the simplist demands. I want to make

my statement today at least with some personal 1 2 words. I didn't come here to participate in a And all of the good people who came 3 charade. today to every hearing that's been happening 4 5 didn't come to participate in a charade. We 6 have other things to do. We have -- we're not 7 here because we like going to public hearings or talking about the horrors of fracking and 8 9 gas infrastructure or climate change. We are 10 here because we are educated citizens who care. 11 Sometimes I'm asked what drives my movement, my 12 answer is always love. We are fighting for our 13 lives and the life of this beautiful planet 14 because we love our lives here, we love our 15 children, our families, our community, our rivers and streams, farms and mountains across 16 17 the this great state. That is what drives this 18 movement. Ask anyone in the room here today 19 why they are here, and I can guarantee you that 20 four out of five people will say because of 21 their children and grandchildren. New York is 22 at a crossroads and we need to lead this nation 23 and the world with an aggressive renewable 24 Energy Plan and energy efficiency plan. We 25 need this plan to reflect not the ramping up of

gas infrastructure that will bring fracked gas 1 2 to our community at the expense of our neighbors and Pennsylvania. We need this plan 3 to reflect the phasing out of the gas and gas 4 5 infrastructure. We need this plan to reflect 6 the step by step shutdown of every nuclear 7 reactor in the state. And as Fukushima showed into our world, we have to finally learn and 8 9 accept that there are no such things as 10 evacuation plans. There's no evacuation plan 11 as climate changes become more and more 12 prevalent. There's nowhere else to go. 13 Mr. Rhodes, and fellow commissioners, the 14 people of New York want the New York State 15 Energy Plan to not be a mediocre piece of 16 writing with glossy photographs and charts that 17 will ultimately sit in an office building in 18 Albany collecting dust on a shelf, much like 19 the state's never released climate action plan. 20 No, we want the New York State Energy Plan to 21 be a living document. A real plan that we can 22 all build and create and achieve together with 23 you. We want to work with you to make sure 24 that New York is a leader that inspires the 25 country and the world of what is truly

possible; that we can stop this madness of 1 2 blowing up rocks for pockets of gas and instead 3 harness the energy of the sun and wind and water. Let's create an Energy Plan that drives 4 5 an upstate economic resolution that will 6 support our young people, our unemployed with 7 manufacturing insulation of renewable technologies. I mean this public session 8 9 should not be the end of this process, But 10 truly the beginning. We look forward to 11 working with you. Thank you.

MR. RHODES: Thank you. Reverend NancyKasper to be followed by Roland Micklem.

14 AUDIENCE MEMBER: My name is Nancy Kasper. 15 I'm a mother and an ordained minister living in 16 and doing good work in the beautiful town of 17 I take a look at this North Rose, New York. 18 Energy Plan and I was pretty impressed. There are a lot of words in here and beautiful glossy 19 20 pictures and very little substance to it. So I 21 brought along a copy of the Jacobson study for 22 you guys so on your next try, you can have it 23 right at your fingertips. So a little joke 24 here. Do you want to know how to make God 25 Tell him your plan. This rather laugh?

uninspired plan was conceived from a very 1 2 narrow, anthropocentric perspective. As if humans were the only life form worth 3 considering. And it was constructed from a 4 5 false belief that we humans are separate from 6 nature. Here's a news flash: We cannot be 7 separate from nature. The big truth is we are all connected. We are all connected. 8 9 Inextricably interconnected and interdependent 10 with all life. Except we seem to have 11 forgotten this truth because nowhere in this 12 plan is there any mention of the collateral 13 damage to wildlife, to animals, to natural habitat, the forests and to other important 14 15 elements for life like water and air. All life 16 that will inevitably suffer, be damaged or 17 destroyed resulted with the implementation of 18 this plan. This plan has no heart, no 19 substance, no clear path or goal. It speaks in 20 vagaries and contradictions, contains conflict 21 of interest and hidden agendas. This plan does 22 not direct us to the correct action necessary 23 to avoid total ecosystem collapse. History has 24 shown us time and again that when humans willfully destroy life in pursuit of power and 25

control, they ultimately destroy themselves. 1 2 What I see in this plan is a history repeating itself today with our culture of consumerism 3 perpetuated by the myth that is wealth and 4 power. And power is control. And we believed 5 6 it well enough to give controlling power to 7 those with wealth. And the irony here is that we're struggling today about energy. 8 The 9 energy that powers consumerism, the energy that creates wealth for the few who want to control 10 11 power at any cost. It's a vicious cycle of 12 destruction. A downward spiral of 13 self-destruction. And, in fact, humans are effectively causing their own de-volution. This 14 15 plan was based on the false assumption that we 16 can dig our way out of this environmental mess. 17 See the paradox? The more we drill, the deeper 18 we get, the bigger the hole in the ozone. Ιf 19 we continue down this path of fossil fuel 20 consumption, we'll end up destroying all life, 21 including our own. Our mother earth is already 22 giving clear evidence of our operating outside 23 of her laws of nature. She'll not support us 24 if we do not support life. And it is clear 25 that humans have already altered the condition

for life on earth. We are experiencing the 1 2 effects of what we have created in this precariously imbalanced ecosystem that's now in 3 crisis. We can see that with mass species 4 5 extension, resources depletion and enviromental 6 degradation. You know it, we know it. We have 7 to face the fact that we have reached a critical choice point. The alarm is sounding. 8 9 There's an urgent call to wake up from the old 10 dream and step into a power of possibility and 11 personal choice to create the future we imagine 12 for our grandchildren by becoming more 13 conscious, more loving and compassionate humans 14 on this planet. The time has come and it is 15 now. So I emphatically urge you to reject this 16 plan as an idea whose time has passed. Heed my 17 words, because when I look at this plan, I hear 18 God laughing, laughing to tears. Thank you. 19 John.

20 MR. RHODES: Thank you very much. Roland 21 Miclem to be followed by Patty Campbell. 22 AUDIENCE MEMBER: Good morning, or good 23 afternoon I guess it is right now. Being a

self-creative person, I'm not trying to brag,
you understand, I would deliver this message to

you in my own way and I hope you will all bare 1 2 with me. It goes something like this: When they go a fracking in the Marcellus shale, the 3 water they will be using will get a thousand 4 5 wails; the gas that we'll be venting soon as 6 your drilling starts, will saturate the 7 atmosphere like one humungous fart; the stuff 8 they will be bringing up from way down 9 underground will make your gag and counter 10 start jumping up and down; those fracking 11 chemicals with names no one can spell, will 12 make a weary cocktail of a water in your well. 13 And then here we go on the final one I just got 14 through doing here. Now, way up here in New 15 York State where we're counting on the governor 16 and hoping he will come through for us when 17 push gets down to shove. Thank you for your 18 attention, Gentlemen. We're going to be doing 19 a musical called Sustainability and it will be 20 in North Rose Wilcott High School at t some 21 date later. If any of you fine gentlemen would 22 like to attend, just get in touch with me after 23 this thing is over and I will give you the 24 particulars. Thank you very much.

25 MR. RHODES: Thank you very much. Patty

Campbell to be followed by Michael Dixon.

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2 AUDIENCE MEMBER: I'm so happy to be amongst all these people who I'm resonating 3 with and to have this opportunity. I don't 4 5 have too much to say because everyone else has 6 said my feelings. But one thing is that I hear 7 these individual comments for fracking and like natural gas is the way to go, now I can send my 8 kids to college, I just hear it too frequently 9 10 everywhere. And, you know, a few years ago, I 11 think it was last year, I gave some money for a 12 counter ad but I never heard that counter ad, 13 so it's really hard for the average person to 14 speak as loudly as the gas companies. So 15 that's one point I want to make. The 16 transportation of the natural gas, I mean even 17 if we don't do natural gas in New York, the 18 transportation -- I mean I see more and more 19 trains with these gas cars and it's really 20 alarming. And in light of the accident in 21 Quebec and just that this is an accident 22 waiting to happen and it's just pretty scary. 23 And all -- this is some accident waiting to 24 happen with all this use of fossil fuels. And 25 I really also think that we need to get away

from the fossil fuels. Let's see, one thing 1 2 that so few people mention is conservation. And I just want to say that I lived in a 3 beautiful old apartment building in Saratoga, 4 5 New York, it was like four-stories high. The 6 ceilings were like 12 to 15 feet high, really 7 high. And when it was cold, like it was last night, it was so hot in there you would have 8 9 your windows open. So I think there's a lot of 10 these old buildings. And if we want to save 11 our old buildings, but couldn't there be some 12 address to the infrastructure maybe that would 13 help create some jobs. So jobs in that 14 section. And just asking ourselves what we can 15 do to change our lifestyles for more 16 conservation and just to see what we can do as 17 individuals. Thank you. 18 MR. RHODES: Thank you very much. Michael Dixon and Kay Kin, they're both from -- one is 19 20 from the -- both from the Vienna Planning 21 Board. Neither are here.

22 Robert Henry.

AUDIENCE MEMBER: I pass. I agree with everything that everyone said here today.

25 MR. RHODES: We've noted it, sir.

Kevin Bernstein to be followed by Phillip
 Rose.

3 AUDIENCE MEMBER: Thank you for the opportunity to speak to the board. My name is 4 5 Kevin Bernstein and I'm providing these remarks 6 on behalf of (inaudible) LLC, which is normally 7 known as Energy Extreme. I will have some written comments by the end of the comment 8 9 deadline. The same state Energy Plan ignores a 10 critical source, and that's propane. The SEP 11 for short failed to identify any strategy or 12 initiative to enable access to a greater supply 13 of propane or development infrastructure to 14 assist with that effort address the supply 15 price that's still upon even in March. In 16 event testimony before the house energy power 17 subcommittee, it stated that, quote, "if 18 there's one lesson learned from the 2013/2014 19 winter, provided market conditions, it is that 20 the infrastructure network was inadequate to 21 meet consumers needs." There are a number of 22 facets to this, the and government can assist 23 in assuring that all human needs are met. 24 However, recent experiences with the proposed 25 Finger Lakes project located in Redding, New

York shows that unfortunately the government is 1 2 not assisting in trying to avert this crisis. Constructing expanded underground storage in 3 the Finger Lakes area near Redding is essential 4 5 to meet the northeast's and New York's propane 6 needs. This is -- the northeast needs this, Ne 7 York State needs this and there's a local need 8 for greater propane infrastructure. In a 2010 9 report it stated that propane is an important 10 heating fuel in New York and the strong demand 11 during the winter heating system puts a strain 12 on the industry's ability to meet that demand. 13 New Yorkers and the entire region in general 14 are highly dependent on propane from outside the region in New York. The Teppco Pipeline, 15 16 which delivers primarily from storage 17 facilities in Texas, recently had pipeline 18 capacity difficulty in propane supply in New 19 York. In recent testimony before the house 20 committee, that I mentioned earlier, the 21 National Propane Gas Association said that the 22 expansion of underground propane storage in the 23 Finger Lakes area near Redding is essential to 24 the northeast propane needs. Called on 25 Govenour Cuomo to approve the facility which

added over 88 million gallons of propane 1 2 storage in the region where demand far out weighed local supply. But the State of New 3 York, including the DEC and the governor, 4 5 failed to make the decision. The underground 6 storage cavern has been nearly five years in 7 the permanent process with everything in the The DEC wants it done, DEC has all 8 wav. information it needs to make the final 9 decision, but yet the (inaudible.) We have 10 11 seen a number of challenges confronting the 12 propane supply chain ranging from pipeline 13 shutdowns to rail strikes in Canada to ships 14 not coming in on time from oversees. Supply 15 lines can and do break during the winter and 16 they have caused shortages in the past. This 17 winter propane marketers themselves needed to 18 drive long distances to obtain supply. Propane 19 industry proposes it addresses these issues and 20 their responsibility weighs through issues like 21 the Finger Lakes storage facility. And now the 22 difficulty stated in the energy plan itself 23 ignores the need and demand for propane in New 24 York despite the fact that the vision set forth 25 in the portion notes that New Yorkers face

rising costs in continuing in extreme weather. 1 2 Talk about how residential, commercial and industrial customers have the tool to easily 3 and efficiently handle their consumers, but New 4 5 YOrk has not taken into light these costs to 6 customers to utilize one of these tools, 7 storage. Finger Lakes ultimately makes available to 2.1 million additional or 8 9 88 million gallons mentioned of local supplies 10 that will be immediately available. Approval 11 of that improves the resistance of propane 12 infrastructure in other regions in the US. In 13 recent weeks a major storage facility in 14 Ontario has seen very high demand to its 15 propane to New York, New England and the mid 16 Were the Finger Lakes facility to be in west. 17 operation, would dramatically reduce New York's 18 demand for propane stored in those areas. Approving the Finger Lakes facility would have 19 20 benefits beyond New York and New England. 21 However, unfortunately regulatory inaction has 22 caused consumers to (inaudible) the impact or 23 willingness of companies to invest in New York, 24 which we understand or understood to be open 25 for business. These issues must be addressed

in the final SEP. And it is time for 1 2 government action because New York consumers 3 and residents cannot afford this. Thank you very much. 4 5 MR. RHODES: Thank you. Philip Rose to be 6 followed by Matthew Lemke. 7 AUDIENCE MEMBER: My name is Philip Rose and I live in a little town called Fenner, New 8 9 York. Fenner has public parking, it has a 10 clean hydropower station and a solar system for 11 pouring that facility with leaders with 12 alternative energy and renewables. And myself 13 and a number of our citizens conducted a 14 petition drive several months ago where 70 percent of our -- of all registered voters 15 16 in our town issued a ban on hydrofracking. 17 It's pretty clear that the that the public is 18 well educated about issues. You have heard testimony continually about what this really 19 20 means. The season for fossil fuels is almost 21 over. It's ending. We already see the end of 22 it, so to put any real serious thought that is 23 really limited and short-sighted. So 24 renewables is with us. We can really do this, 25 obviously if we put our minds to it. If we

lean the human intelligence toward this 1 2 problem, we can solve it creatively and cleanly. We don't need to continue these other 3 processes that urge -- that are not working. 4 5 The plan really needs to be a visionary plan. 6 It needs a -- it needs to have steps that 7 really put in the direction of a sustainability planet, a sustainability state. Nobody want 8 this other environment. We have all benefited 9 10 over the years, but the need is really on this. 11 So what the plan needs to do? It needs to, 12 first of all, to really increase the capacity 13 of electricity to handle the renewables. It 14 really needs a plan how this electricity is 15 going to solve the problem. If we're going to 16 use our cars and our homes with electricity, we 17 need to be powered by this. We need to really 18 increase that dramatically. We need clear 19 benchmarks that aren't part of this plan. We 20 need to eliminate hydrofracking. We need to 21 decommission nuclear power. We need to develop 22 alternative transportation methods. We need to 23 really look at this (indicating). I work in 24 Syracuse. I drive around. I see these new 25 construction going up for buildings and clearly

they're using none of these new techniques. 1 2 Where are the guidelines? There's no passive solar being used. The insulation looks minimal 3 to me. It's really poor construction. Housing 4 5 projects going up, these buildings going up. 6 They don't take into any consideration all 7 the -- what we've learned on how to reduce 8 energy needs. So there needs to be strong 9 legislation and guidelines for construction and 10 for refitting all the homes that we have now 11 and public funds to do that. Liquified gas, I 12 mean this is a disaster. Nuclear is a 13 disaster. I mean it's clear we need to bring 14 people to the table. Really need to bring 15 people who have done this research. There's 16 some incredible intelligence and information 17 out there now about this. It's global too. 18 You know, America needs to step up. New York 19 needs to step up and really be part of that. 20 We can no longer be obstructing the future. 21 The planet is calling for this. We need to 22 participate in that. The people need to be 23 brought to the table. I think that's all I 24 want to say. And I appreciate your coming 25 here, I appreciate you listening and I really

look forward to working with you in the future 1 2 to really make this a sustainable planet. MR. RHODES: Thank you. Matthew Lemke to 3 be followed by Richard Montana. And then I'm 4 5 gonna suggest a five minute beak at that point. 6 AUDIENCE MEMBER: Good afternoon and thank 7 you for this opportunity to testify today on the 2014 draft Energy Plan. My name is Matthew 8 9 Lemke and I'm the Southern Tier Organizer and SUNY Binghamton Project Coordinator with the 10 11 New York Public Interest Research Group. 12 NYPIRG is the state's largest consumer and 13 environmental advocacy organization. And 14 NYPIRG representatives have spoken and on different topics at each of the scheduled 15 16 hearings on the Draft State Energy Plan. And 17 we'll submit formal comments, written comments, 18 at a later date. I will focus my comments 19 today on how the plan addresses natural gas. 20 The Draft State Energy is entitled New York, 21 Shaping the Future of Energy. And two of its 22 four key metrics are a cleaner environment and 23 improved energy affordability. However, the 24 plan forecasts significant increases in

25 consumption of natural gas to meet our energy

needs as well as forecasting the tripling of 1 2 natural gas production from shale deposits within New York with the use of fracking. 3 Relying on natural gas, especially from 4 5 fracking, within New York or beyond it's 6 borders seriously undermines both of those 7 goals. The plan envisions a massive increase in natural gas use in New York over the next 20 8 9 years requiring significant buildout of natural 10 gas infrastructure. The plan contains 11 initiatives to encourage oil to gas conversion 12 for heating buildings, accelerate investments 13 in natural gas distribution rely more heavily on natural gas for electricity generation and 14 15 embrace fracked gas from other states. 16 So let's talk about the environmental

17 impact. Increasing reliance on fracked gas to 18 meet our energy needs will not result in a 19 cleaner environment. Fracking results in 20 significant methane emissions during every step 21 of the process, extraction, transportation and 22 distribution. And pound for pound methane is 23 far more a potent greenhouse gas climate change 24 than carbon dioxide. The state must look at 25 all greenhouse gas emissions, not just carbon

dioxide. If we're serious about addressing 1 2 climate change, methane emissions were fracked shale gas seriously undermines any benefits of 3 reducing carbon emissions by converting from 4 5 other fossil fuels to natural gas. The state 6 simply cannot meet its goal of reducing 7 greenhouse gas emissions 80 percent by 2050 under this plan. Methane is a far more potent 8 9 climate change agent than carbon dioxide and a 10 massive shift toward natural gas, especially 11 fracked gas, will undermined the plan's stated 12 goal of reducing greenhouse gas emissions.

13 In addition to greenhouse gas emissions, 14 fracking is a dangerous polluting process and 15 the impacts of fracking on water and air 16 quality are ignore completely in this plan. 17 These impacts have not been acknowledged and 18 accounted for in this plan, despite an entire 19 section of Volume 2 being dedicated to impact 20 and consideration. While this plan states that 21 this does not call for fracking to be allowed 22 in New York, this claim is contradicted by the 23 forecasts included in this plan. Indeed the 24 plan's assumption that natural gas production 25 will more than triple within New York State by

1 2035 can only be achieved by allowing fracking. 2 If a key goal is to protect the environment 3 here in New York, then fracking must be banned 4 and the plan must chart a course to wean New 5 York off natural gas, not increase our reliance 6 on it.

7 So let talk a little about the consumer impact. Heavy reliance on natural gas would 8 leave consumers vulnerable to the volatile 9 10 fossil fuels market undermining the plan's core 11 goal of energy affordability. Given the 12 likelihood of regulatory and global market 13 changes, this plan's failure to account for those would leave consumers in the lurch. The 14 15 plan relies on price forecasts that operate 16 under the assumption that current laws and 17 regulations remain generally unchanged through the projection period. With more information 18 19 coming out about the negative impacts of 20 fracking, national and state laws and 21 regulations are very likely to be strengthened. 22 This is already happening. In fact, since this 23 draft plan was released, Colorado announced new 24 emisson regulations for fracking. Therefore, 25 relying the assumption of an unchanged

regulatory regime is a clear flaw that leaves 1 2 consumers vulnerable to price spikes. Also the plan explicitly acknowledge the potential for 3 increased export of natural gas and resulting 4 price volatility that would be created, by the 5 6 plan only calls for monitoring the situation. 7 Given the numerous currently proposed export terminals failing to account for the drastic 8 price increases that global export of natural 9 10 gas will inevitably cause in domestic market is 11 a serious shortcoming that leaves consumers 12 vulnerable. Instead of increasing our reliance 13 on natural gas and putting rate payers, public health and our environment at risk, the state 14 15 needs to maximize its commitment to renewable 16 energy and energy efficiency. The final plan must be strengthened to account for the 17 18 negative environment and consumers impacts from 19 fracking and natural gas reliance, provide a 20 clear road map for moving away from fossil 21 fuels, including natural gas, and move New York 22 toward a carbon free nuclear free future. 23 Quite frankly, New York deserves better. Thank 24 you once again for this opportunity to testify 25 here today.

1 MR. RHODES: Thank you very much. 2 AUDIENCE MEMBER: My name is Rich Montana and I live essentially on Long Island but I 3 spent the last four years of my life in Central 4 5 New York completing an undergraduate degree at 6 SUNY Cortland. I'm here right now because I'm 7 concerned and an informed citizen of New York State. Before I start I would like to thank 8 9 you for your time and allowing me to share my 10 thoughts and opinions here today. He main 11 point of this draft state Energy Plan is to 12 have a cleaner environment and improved energy 13 affordability, one obstacle to achieve those 14 goals would by hydrofracking being permitted in 15 New York State. To achieve these goals, the 16 state must put a ban on hydrofracking. The 17 current methane use and the drilling coupled 18 with hydrofracking and the dangers that 19 surround our environment at the fracking sites. 20 This method of fracking a natural gas provided 21 both air and water would result in significant 22 methane leakage previously noted. If New York 23 State's goal to reduce greenhouse emissions by 24 80 percent by 2015, that's previously promised by executive order, hydrofracking cannot be 25

part of New York State's future. In an attempt 1 2 to curb gas emissions, renewable resources are needed in a greater effort to make solar and 3 wind power available to the average household 4 5 must be made available to make reusable energy 6 more accessible to the average family. 7 Introduce them at a young age. Put solar panels on public schools would be widely 8 9 beneficial to educate the youth on green energy 10 as well as setting positive examples and 11 providing public schools with reusable energy 12 sources. Furthermore, attention must be paid 13 to our nuclear program. Nuclear sites are 14 clear and present hazards for our communities. 15 They pose a serious threat for a wide variety 16 of accidents as well natural disasters. Nuclear energy should be halted in the State of 17 18 New York. Active nuclear sites in New York 19 should be subjected to the highest safety and 20 regulatory standards. Thank you, again, for 21 giving me an opportunity to speak today. I 22 hope this time will result in a cleaner, better 23 environment for New York State. 24 MR. RHODES: Thank you very much. We'll

25 take a break at this point. We'll shoot for

five minutes and then we'll resume. 1 2 (A brief recess was taken.) 3 MR. RHODES: Zachary Allen to be followed by Nicole Clark. 4 5 AUDIENCE MEMBER: Hello. My name is 6 Zachary Clark and I'm a student at SUNY 7 Cortland pursuing currently a degree in conservation biology. 8 So the issues presented in the Draft 9 10 Energy Plan strike me as incredibility 11 important to address. I would like to thank 12 you for this opportunity to speak as a concerned resident of New York State. I would 13 like to discuss climate change and how New York 14 15 State addresses these issues. 16 In the Draft State Energy Plan state is 17 not adequately meeting our need to reduce 18 greenhouse gas emissions by 80 percent by 2050. 19 The plan focuses on reducing CO2 emissions but 20 fails to account for other greenhouse gasses 21 which are more potent, such as methane. To 22 combat this issue, the final energy budget must 23 include a 14 percent reduction of greenhouse 24 gas emissions by 2018 from 2011 levels and 25 20 percent reduction by 2021. In order to meet

our 80 percent by 2050 reduction in emissions, 1 2 we need to move away from fossil fuels like natural gas that release large amounts of 3 greenhouse gasses like methane through burning 4 5 and drilling for it through hydrofracking. We 6 also need to transition our energy system to a 7 clean renewable system and support energy efficiency. 8

9 I grew up in the Adirondacks and I would 10 love to see the healthy and clean New York 11 State I saw as a child stay clean. And the 12 only way that can happen is through support of 13 the renewable energy resources and reducing 14 emissions as well as improving energy 15 efficiency. Thank you for your time.

16 MR. RHODES: Thank you very much. Nicole17 Clark to be followed by Diane Swords.

18 AUDIENCE MEMBER: I want to thank you for 19 giving me an opportunity to speak to you today. 20 My name is Nicole Clarke and I live in East 21 Islip on Long Island. I'm currently a student 22 at SUNY Cortland. The reason I'm talking to 23 you today is to express my concern for the 24 future of Central New York, which is my local 25 environment.

Everyone here today can agree that we need 1 2 to reshape the future of energy in New York. Coincidently, that's the title of our Draft 3 State Energy Plan. However, the goals of 4 5 reaching a cleaner environment and improving 6 energy affordability is not realized in this 7 The plan proposes that a massive plan. increase in natural gas and use in New York 8 9 over the next 20 years with a significant 10 buildout of natural gas infrastructure and 11 hydrofracking. This is implying that we would 12 have to rely on fracked gas to meet this energy 13 goal but this will not result in a cleaner environment. 14

15 Obviously fracking is a dangerous 16 polluting process and the impacts a fracking on 17 water and air quality are ignored completely. 18 These impacts have not been acknowledged or 19 accounted for in this plan. We would be taking 20 one step forward and about 20 steps back if we 21 allow for fracking in the State of New York. 22 If the main goal is to protect the environment, 23 fracking is not the answer.

I take the this issue personally because my residency for four years will be Central New

York. I've made personal connections within 1 2 this community and I care deeply about their future. Hopefully listening to us today will 3 help make the plan making New York wean off of 4 5 natural gas and not increase our reliance on 6 it. The cards are in your hands. Thank you. 7 MR. RHODES: Thank you very much. Diane Swords. 8 AUDIENCE MEMBER: She left. 9 10 MR. RHODES: Jessica Johnnes to be 11 followed by Maria Sherwood. 12 AUDIENCE MEMBER: Thank you. My name is 13 Jessica Johnnes. I'm a recent graduate of SUNY Purchase and I currently live in Cortland, New 14 15 York. I want to thank you for the time and the 16 opportunity to speak before you today. I would 17 like to talk to you about the New York State 18 Draft Energy Plan proposal to increase the 19 comsumption of natural gas in order to meet New 20 York's energy needs. Not only do I feel this is the wrong 21 22 direction New York needs to take to reach a

23 more sustainable energy future, but this 24 proposal also falls short on the promises New 25 York has already made to combat global warming.

I've lived in Upstate New York for my entire 1 2 life, which means for me, and most everyone in this room, hydrofracking is not a new word. My 3 family owns a 114 acre farm that sits squarely 4 on Marcellus shale and we've been offered to 5 6 lease our land, as well as our neighbor 7 The monetary promises offered to us farmers. 8 have not been lost on our ears either. Μv 9 mother was diagnosed with cancer five years 10 ago. At that time she was the sole breadwinner 11 in the house and she passed away less than a 12 year later. My step-father, who does not have 13 a college degree that is almost necessary 14 today, was fortunate enough to find work and 15 we've been able to keep our property. Our 16 story is not so different from many stories 17 that are exemplified by the gas industry, but 18 my family chose not to frack. The more New 19 York State holds off on hydrofracking, the more 20 science reveals the deep and lasting environmental effect of this process. 21

22 We can just look to our neighbors of the 23 south to see numerous mishandling of waste 24 water, contamination to well water, the 25 degradation of air quality and the degradation

of road infrastructure. The New York State 1 2 Draft Energy Plan completely ignores the pollution to our water and impacts on air 3 quality and does not acknowledge an adequate 4 5 system to deal with these repercussions. These 6 repercussions affect our heath and ultimately 7 undermine whatever initial economic advantages that are produced. We need to focus on the 8 9 long-term solutions that solve our energy 10 problem.

11 What is more concerning for me is that New 12 York State has a commitment to reduce 13 greenhouse gas emissions by 80 percent by year 14 2050. This is a commitment to combat global 15 warming and develop our state towards a cleaner 16 energy future. This goal simply cannot be met 17 by hydrofracking and building infrastructure dependence on natural gas in New York. 18 Hydrofracking releases significant methane 19 20 emissions -- as many people have said today --21 all along the development process and, as you 22 know, methane is more potent greenhouse gas 23 than even CO2.

I'm calling for a revision in the New YorkEnergy Plan that will focus our promise of

80 percent by 2050. To do this, our 50 percent 1 2 by 2030 goal should include all greenhouse gas emissions, not just CO2. I would also like to 3 see mid-terms targets of 14 percent by 2018 and 4 5 20 percent by 2021 that will help ensure our 6 goal. Ultimately, I want to see the expansion 7 of renewable technologies such as solar and 8 wind power and not natural gas. I want to see a beautiful New York and focus on renewable 9 10 energies that will set us on the path to get us 11 there. Again, thank you for your time. 12 MR. RHODES: Thank you very much. Maria 13 Sherwood. 14 AUDIENCE MEMBER: She left. 15 MR. RHODES: Kaylee Marlow to be followed 16 by Evan Greenberg. 17 AUDIENCE MEMBER: Good afternoon. And 18 thank you for allowing me to speak today. Before I say anything, I want to note that 19 20 we've heard a lot of stuff bad about fracking, 21 and just to bring some balance I want to say 22 something good about fracking. I mean the 23 ability to make tap water flammable is a 24 scientific achievement, it's very useful in 25 entertaining small children, other than that,

there are really no benefits to hydrofracking 1 2 and it's absurd that we have not it yet. We have only have to look to Pennsylvania to see 3 the benefits of hydrofracking. I could pull up 4 5 my cell phone and go on Youtube right now and 6 find at least a dozen videos of pipe leaks, 7 pipe explosions and hydrofracking incident. Ι could find 900 different articles on those 8 9 subjects. I could find 900 different articles 10 on nuclear energy. They can see what disasters 11 can happen here. Because according to reports 12 that I read time ago, the nuclear power plants 13 in the United States are built by the exact 14 same design as nuclear power plants in Japan. 15 That means what happened to Japan can happen 16 That scares me considering we have -- I here. 17 think we have three nuclear plants in New York, and some of which are around where I live and 18 19 that scares me. I think we need to transition 20 to a green energy efficiency in New York. The 21 only sector that did better in the recession 22 in, the great recession, was the green sector. 23 I think we had to just keep on reinvesting this 24 green entity. We need a hydrofracking ban. 25 The dangers are real and the science is on our

side. So I just want you to ban hydrofracking 1 2 and then we'll come back and have another discussion on it. Thank you. Have a nice day. 3 MR. RHODES: Thank you very much. 4 Evan Greenberg to be followed by Mona Perrotti. 5 6 AUDIENCE MEMBER: My name is Evan 7 Greenberg and I'm a student at Binghamton 8 University. Thank you for the opportunity to 9 speak today. I may not wake up every morning 10 and put a suit on, I may not shave my face and 11 comb my regularly, I may not have a speech 12 printed or any public experience whatsoever, I 13 may not have a long family legacy in politics, 14 I may not have a huge policy campaign followed 15 by big business, but I'm still an American 16 citizen and I deserve to have my voice heard. 17 I desire to drink clean water, I desire to have 18 a clean environment available to me. The use 19 of natural gas in this state is not the 20 solution to the environmental energy problem we 21 are facing. Fracking will reduce our plant and 22 water making consumption nearly impossible. Ιt 23 will diminish property value, exaserbate 24 climate change and hinder any growth in the 25 green energy we need. We need to invest in

green clean wind and solar electric power. 1 2 This will not only create jobs, but it will also reduce the greenhouse gas emissions. 3 We need to set goals and planning needs of 4 5 reaching them instead of increasing natural gas 6 production. We need to increase renewable 7 energy production. Our future should be full of clear water and land. Our lives and our 8 children's lives should see progress toward 9 10 sustainability, not toward larger reliance on 11 promoting fossil fuels. Thank you for giving 12 me this opportunity to speak here today and 13 thank you for taking my opinion and the opinions of all these educated people into 14 15 consideration when this Energy Plan is drafted 16 and revised.

MR. RHODES: Thank you very much. MonaPerrotti followed by Sandy Scofield.

AUDIENCE MEMBER: Hello. Thank you, I'm glad to be here today and I thank you for this opportunity to come and speak on the Energy Plan draft. I'm from Clinton in the Utica area and I do wish, I would like to say, that you have included other hearing dates in other areas of the state. Certainly Binghamton area

and Utica. And had you considered better
 parking arrangements.

3 To the plan. I question the plan's reliance on, and indeed that seems to be a 4 vigorous push for, greater dependence on the 5 6 use of natural gas in years ahead. This 7 document does not access the real dangers and impacts of fracked gas production, 8 9 transportation and usage. The plan does 10 mention in a gentleman way a certain for health 11 and enviromental issues but does not 12 specifically address the concerns. The release 13 of powerful greenhouse gas methane is barely 14 noted. And it is unaddressed in the plan. Ι 15 ask how you can present a plan that purports to 16 take us safely into the future without firmly 17 acknowledging these realities and using this 18 knowledge to shape a true plan. I question 19 this draft with a serious plan because it 20 implies a greater use of climate changing 21 fossil fuels and ignore the opportunity to 22 create an aggressive and effective blueprint 23 based on conservation and renewable energy 24 I ask that you redraft this plan, resources. 25 which does not contain clear goals and mandates

and benchmarks with time frames. I ask that 1 2 you reconsider what you have in place and have our energy production come from a true 3 renewable resource. These figures stand in the 4 5 strict contrast to renewable energy production 6 already achieved by other nations. In fact, 7 within the past few years it was revealed that wind power had become the largest environment 8 9 production sector in Spain. In 2013 Mark 10 Jacobson and others revealed a detailed report 11 that lays out a specific plan for New York State to achieve a fully renewable energy 12 13 future or reality by 2030. I did not see that 14 valuable report referenced any place in your 15 plan and I ask why not. I would like you to 16 know how difficult it was to repeat, at least 17 easily, references within the plan to clean 18 energy, which was not clearly defined but which 19 clearly indicated to me natural gas was 20 included. Each of us here, including all of 21 you I believe on stage, knows that the term 22 clean energy cannot be applied to the fossil 23 fuel natural gas. In my eyes, this 24 misapplication of the word clean compromises 25 the draft document. Also there was the

repeated use of the word consumers. I believe 1 2 that this plan, while it should, of course, recognize the energy needs of its citizens for 3 the environment, needs of this should speak to 4 5 the citizens of New York who are looking for an 6 outline path toward a safer energy end future 7 for us all. Please reconsider this plan. 8 There's no more important responsibility than 9 getting our energy future right and I ask that 10 you just do that. Thank you. 11 MR. RHODES: Thank you very much. Sandy 12 Scofield to be followed by Jessica Azuley. 13 AUDIENCE MEMBER: My name is Sandy 14 Scofield and I'm from Clinton, New York and I appreciate you planning a day for us to be able 15 to get to your hearing, thank you very much. 16 17 It seems that this Energy Plan puts a major 18 reliance on natural gas. Not a good plan. Gas 19 is a depletable, finite resource. I've heard 20 that fracked wells are productive for only six 21 to 20 years maximum. What do we do when the 22 gas runs out? What is New York State's Energy 23 Plan then? Resource depletion should be 24 addressed in any Energy Plan that is drawn up. 25 And actually I don't see why we couldn't leave

the gas in the ground for future generations 1 2 when fossil fuels will be extremely scarce. What I would like to know, and I -- actually 3 from the Energy Plan, is how to retrofit my 4 5 home for new sources of energy? I rely on gas, 6 darn it all. And I sure would like to have a 7 way to figure out how to retrofit my home. Ι would also like to know guidelines and 8 9 incentives to help communities provide their 10 own decentralized energy that Al Gore talked 11 about so long ago. Decentralizing energy is the safest as far as security goes. The safest 12 13 way to go. And probably a much more efficient 14 way for us to produce energy. I would like to 15 know what intensives will be provided for 16 developing renewables and what are -- these 17 There's a renewable that we haven't maybe. 18 even talked about yet, nobody has mentioned 19 hydrogen. The Energy Plan could provided 20 models of innovative projects that are 21 currently happening in our county. For 22 instance, just the other day over at Oneida 23 County Sheriff Rob Maciol announced that our 24 county prison will be the first in the state to 25 be completely fuel by solar energy on an

eight acre site. These examples should be part 1 2 of an Energy Plan for other communities. And I'm sure there's many other examples, so... 3 The new Energy Plan should focus on helping New 4 York transition from fossil fuels to 5 6 renewables. And I ask you to come back with a 7 forward looking innovative, inspirational plan 8 making renewables our major source of energy. 9 Thank you so much.

10MR. RHODES: Thank you so much. Jessica11Azuley to be followed by Issac Silberman.12AUDIENCE MEMBER: My name is Jessica13Silberman. I'm the program director for the14Alliance for a Green Economy, a coalition of15grassroots organizations working together on

environmental and energy issues in New York.

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17 Like so many here, AGREE objects to this 18 plan's promotion of natural gas. A lot of 19 people have talked about this; the conversion 20 of oil to natural gas and home heating the 21 construction of new natural gas pipelines. 22 This is the wrong direction. And we also urge 23 you to, in fact we demand, real targets for 24 this plan and for how we're going to meet the 25 goals that have already been set by the state

for renewable energy and efficiency by 2015. 1 2 You note in the plan we're really struggling, but we don't see a real clear plan in this 3 document for how we're going to reach those 4 5 goals next year. We also don't see clear goals 6 for 2020 and 2025 for renewable energy and 7 energy efficiency. So we really need these to be part of the Energy Plan. Since so many 8 9 people are talking about natural gas today, I'm 10 actually going to focus my remarks on nuclear 11 in the plan. The Alliance for a Green Economy 12 is one of the main watch dog organizations for 13 nuclear reactors here in Central New York. So 14 New York has six nuclear reactors, all of which 15 are scheduled to retire by 2050. The draft 16 energy plan inexplicably ignores this 17 retirement schedule. It's not mentioned in the 18 plan. Two of these reactors, Nine Mile Point 1 19 and Ginna, are two of the oldest nuclear 20 reactors in the US and they're scheduled to 21 retire in 2029. Yet the plan projects nuclear 22 generation levels for 2030 above what they are 23 today. There's no rational basis for this. 24 The retirement schedule for the state's nuclear 25 reactor must be accounted for in the final

energy plan. We should see that 2030 number go 1 2 down based on these retirements that are scheduled. We believe that nuclear closures 3 will likely come sooner rather than later for 4 5 many of the reactors here in New York. The 6 nuclear industry in the US is seeing a record 7 number of plant closures due to a combination 8 of rising maintenance costs and inability to 9 complete with low cost alternatives, including 10 wind and solar. Various economists have put 11 many of New York's reactors on the short list of most likely to retire early. Specifically 12 13 Fitzpatrick in Oswego, is owned by Entergy, is 14 already losing money according to analysts. Entergy is cutting workforce at Fitzpatrick and 15 16 failing to fix critical equipment like their 17 expensive condenser, which has caused numerous 18 unplanned power changes in the last year. We 19 know it is up for replacement and they have not 20 completed to replace it because it costs so 21 much. Unless Entergy can wrangle some kind of 22 subsidy from the state, Fitzpatrick might 23 should down due to financial loss in the not 24 too distant future. The next is Ginna in Wayne

County will see its above market contract end

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this summer and may also close early due to 1 2 financial distress. But we don't see any of this in the Energy Plan. It's important to 3 remember that all of New York's nuclear 4 5 reactors threaten public health and safety, 6 especially as they age as the companies resist 7 spending money to maintain them. Every day 8 these reactors operate we are at risk of an accident. Meanwhile, all of these reactors are 9 10 creating nuclear waste that will remain 11 radioactive and extremely dangerous for tens of 12 thousands of years. The Nuclear Regulatory 13 Commission has no plan for how it's going to 14 move this waste to a permanent repository and so it remains local in the community in storage 15 16 containers that are not designed for long-term 17 storage. Other than Indian Point, which the 18 state is working to close by preventing 19 relicensing, there's no mention of the possible 20 early nuclear closures and no consideration in 21 the plan for how nuclear power will be 22 replaced. The Energy Plan should include 23 contingency plans for all nuclear reactor 24 replacement and these should include strategies 25 for replacing nuclear power with renewable

energy efficiency and policies that will
 facilitate a just transition for nuclear
 workers and reactor communities.

I just want to use the remainder of my 4 5 time now to deliver a letter signed by 36 6 organizations demanding that the Energy 7 Planning Board release to the public two documents that are footnoted in this plan but 8 9 which we haven't seen: They're the forthcoming 10 greenhouse gas inventory and the study on 11 efficiency and renewable potential in New York. 12 These are critical documents for the Energy 13 Plan. We've wanted to see what this study says 14 of what that potential is for energy efficiency 15 and renewables in New York. And the ways it's 16 discussed in the plan lead me to believe that 17 it's flawed and I would like to see that so I 18 can comment on it as part of the public comment 19 process. So I hope that you will release those 20 plans, even in the draft form that they're 21 used, to inform the energy plan and to extend 22 the public comment period to give us adequate 23 time to an analyze the studies that have formed 24 this Energy Plan and allow us to comment on 25 them. Thank you.

MR. RHODES: Thank you very much. Issac
 Silberman.

3 AUDIENCE MEMBER: My name is Issac Silberman. I'm from the organization Citizens 4 Action of New York based out of Binghamton. 5 I 6 really appreciate the opportunity to speak 7 today. At the same time I do want to acknowledge some points with accessibility 8 today. Parking was a bit of a bear. Like I 9 10 said, I came up from Binghamton and traveled 11 with this fine, beautiful human being to my 12 left who, while is quite mobile, we had quite a 13 walk to get here.

So one point that I actually want to 14 disagree with is nearly everyone who has spoken 15 16 today is the usage of the word natural gas. 17 This is fracked gas. That's what it needs to 18 be referred to in this document, and in all 19 other plans as well. So I live eight miles 20 above the border of Pennsylvania in Broome 21 County. Along that border there's fracking 22 going on as close to the border as the law 23 allow. These people are getting sick. There's 24 contamination of air and water is not some 25 strange abstract thing to me or my community,

nor are the effects of climate change. 1 We 2 suffered from two multi-hundred year floods in 2006, 2011. So we're on the frontline for the 3 potential for fracking and also for climate 4 5 change. So it's not okay to balance an Energy 6 Plan on the backs of rural Pennsylvania and 7 potentially rural New York. You can clap if you want to, thank you. Fracked gas is a 8 9 derailment fuel. It's not a bridge fuel. 10 Natural gas and bridge fuels, both terms that 11 were -- that were created by people who are 12 much better paid than myself and my colleagues 13 in the industry that try to intentionally mislead the public. And investments in 14 15 fracking infrastructure and pipelines, et 16 cetera is a 50 to 80 year commitment in fracked 17 gas as of a fuel. In Pennsylvania there are 18 almost 9,000 active wells. There are over 19 50,000 planned. They're a fifth of the way 20 through in the New York. There are 50 to 21 100,000 fracked well pads planned. That's 22 absolutely unacceptable. This plan is very 23 vague. I would say everyone here agrees that 24 it implicitly calls for more fracking. Right 25 now there are 15 million Americans in 11 states

who live within one mile of a fracking well. 1 2 Within one mile. What you're seeing is industry arrogance coming out. You're seeing 3 the cover-ups that they're pulling. And we 4 5 live with this as a very stark amount. Now, 6 meanwhile you all, you gentlemen and ladies 7 that I'm addressing right now, you have the opportunity to lead us. You really do. 8 This 9 is about my future. I'm young. I got 10 organizing completely by accident young, but 11 this is my future. Do I want to have -- I 12 honestly don't, I'm 24-years-old, whether I can 13 honestly bring kids into this world. And I call on all of you to lead us. You have the 14 15 information, it's out there. There are people 16 who can -- there's going to be incredible 17 amounts of technical information that's readily 18 There's renewable energy that's available. 19 possible. And we need it. And we demand it. 20 We need it in the southern tier. The southern 21 tier can be a hotbed for it and that's, well, 22 what we need. So I appreciate the clapping to 23 comments. I encourage all of you to come into 24 our drilling sites in Pennsylvania, come home 25 with nose bleeds, come home with headaches,

come home having to take a map for four hours 1 2 because of who the hell knows what's in the This is a stark reality that we live with 3 air. in the southern tier. Along with our community 4 5 being mapped out for the pipelines. The grid 6 work is already mapped out. EPA requires, in 7 order for frack to occur, you need to have a pipeline within a mile. That's the -- that's a 8 9 the completion. And those pipelines, meanwhile 10 they're leaking and making people sick and 11 we're not okay with that, and we really demand that you take us through a renewable future 12 13 that we have. I really appreciate the 14 comments. Have a great day. Thank you. 15 MR. RHODES: Thank you very much. I 16 didn't call a fellow speaker. Casey Marlow 17 followed by Geoff Wright.

18 AUDIENCE MEMBER: Thank you. Thank you 19 for giving me a chance to speak. I stepped out 20 for a minute but came back. And I just want to 21 say that thank you again for having this panel. 22 I felt a little bit like the parking to get 23 here was a little bit like a -- you know, the 24 charge for the parking for a public hearing and 25 it was far away and was uphill. Ιf

hydrofracking does go through, which I 1 2 sincerely hope it doesn't, it will not, I'm totally willing to lay my life on the line to 3 stop it as much as I can. We need a plan that 4 5 aligns with the innovative and forward thinking 6 for the organized movement and power 7 industries. One which supports the rich agriculture of our region. Hydrofracking, 8 9 which is implicit in the Energy Plan being laid 10 out, threatens local economies. We need 11 general plan, an honest Energy Plan, solely 12 complies to the clean power of solar, wind and 13 water. We need an energy leader, not followers 14 behold into corporate gas and oil industry that 15 have little to no connection to our community. 16 The targets percentage of renewable energy in 17 this plan should be 100 percent as soon as 18 possible. And so I live just southeast of here 19 in a small town. I have solar and wind power 20 on our little place and on a land trust and I 21 know that it takes -- how much energy it takes 22 to turn on a light bulb. And we practice very 23 strong conservation. As there's a nearby 24 organic dairy farm who farms for their 100 plus 25 cow farm to use exclusive solar energy. And

energy plan should take into account the real
 production done cost of energy, present cost,
 community and landscape and quality of life.
 Infrastructure will effect home value and
 health. I really want to see more renewables
 in the energy plan. Thank you.
 MR. RHODES: Thank you very much. Geoff

8 Wright followed by David Fischer.

AUDIENCE MEMBER: Hello. I'm Geoff Wright 9 10 I live here in Syracuse in a suburb. I would 11 like to be able to thank this panel for being 12 open to our comments, and I do. However, it 13 couldn't have been made more difficult to get 14 here if it had been planned that way. Not to 15 be directly confrontational to the whole panel, 16 but at least one of you here okayed this 17 location while being aware of the unusual 18 complication it would pose to those wishing to 19 attend. Besides it's our obligation, it's 20 climate change. It's our obligation. I'm here 21 because I have a daughter who will be 64 in 22 2050. She's given us three beautiful 23 grandchildren and they will be 44, 40 and 38 24 respectively in 2050. We have -- as a million of our children here -- we have an obligation 25

to be a good father and grandfather and simply
responsible adults here. But my obligation to
show up and rally and to comment here carries
very little impact as compared to your
obligation as the persons who actually
influence policy to effectively protect the
future of our future generations.

Now, at the intentional risk of sounding a 8 little confrontational, I would like to make an 9 10 observation of what seems to be the obvious. 11 The plan couldn't have been more favorable to 12 the gas and oil industry as a whole if it had 13 been written by an agent of the gas and oil industry itself. Might believe that the 14 15 authors of the New York State Energy Plan 16 acting as agents of humanity as a whole can do 17 much, much better than this. Thank you. 18 MR. RHODES: Thank you very much. 19 AUDIENCE MEMBER: This may seem a lot like 20 what the others have said. I'm going to 21 reiterate it in my own words. My name is David 22 Fischer. I'm the chair of the Sierra Group, 23 more specifically (inaudible) and more 24 specifically an expert on mushrooms. I'm also 25 a father and I'm a grandfather. And in 2009,

after hearing an increase of global warming was 1 2 something Al Gore recently made up for political reasons, I chose to bring myself into 3 it and get some hard data on global warning. 4 5 That's the most sobering investigation any 6 evolutionary biologist can pursue. If you 7 understand that for the species of this planet from a condition within which homosapien 8 9 evolved, you can the know about fossil fuels 10 and greenhouse gasses and the global warming 11 and climate change and if (inaudible.) То 12 suggest that our energy path forward requires 13 natural gas and other fossil fuels seems to me 14 an assertion of hopelessness for it is 15 exceptionally clear that continued reliance on 16 fossil fuels, particularly the new fossil fuels 17 which are available only via extreme gassy 18 pollution modes of exchange, is the surest way 19 to ensure that humans fall victim to the longer 20 term impacts of our short-term energy being. 21 It is what my understanding of what some of my 22 fellow citizens were demonstrating today in 23 their comments here as apparently not hatched 24 by the authors of the graft Energy Plan. 25 Enough on climate. Let's talk money. I would

like to make a point of which every New York 1 2 State citizen, regardless of what was -- what he or she may think about fracking, ought to be 3 aware, and that point is that natural gas 4 industry has every intention of building the 5 6 facilities noted to turn today's natural gas 7 prices into a memory like gasoline pump prices of less than a dollar a gallon. For God's sake 8 9 if we turn away from fossil fuels and 10 diligently work toward a new central approach 11 to energy, because not doing so is 12 environmental obtuse, let's do it because we 13 don't want to be trapped by an industry who's 14 overriding concern is supporting the people 15 whom finances of the New York State taxpayers 16 is of no concern unless it adversely impacts 17 corporate profits. Thank you for the 18 opportunity to speak.

MR. RHODES: Thank you very much. Reana
Loeb to be followed by Emily Bishop. Em lee by
shop.

AUDIENCE MEMBER: Hi. I'm Reana Loeb. And I want to express, first of all, my agreement with most of what has been said here, and well said. Better said than the official

1 document that came out as an Energy Plan. It's 2 disgraceful, you know. I hear people saying thank you for hearing us. I don't know if you 3 remember hearing us. It doesn't seem that way. 4 5 Are you hearing the scientists who are telling 6 you about the climate change? And it's real, 7 And by 2050, if we haven't done something man. significant, we don't know where we're going to 8 9 be. Now, I won't be here then, but my 10 great-grandchildren will, and perhaps their 11 children. Do you have any grandchildren, 12 great-grandchildren or just children? If you 13 do, think about them and while you make these decisions. Think about them. This isn't some 14 15 fantasy. You know they're not all going to 16 escape to us during the Cold War in some 17 underground shelter where we'll all be safe. 18 No. This serves this man at the time as 19 indigenous people. We say our mother. You 20 don't have to adopt that, just follow what your 21 scientists tell you for Heaven's sake. Because 22 it's all one. It's the truth. And I'm asking 23 you if you can't do what is right because of 24 your jobs or your money, stop and think of your 25 children, grandchildren, great-grandchildren

and everyone's else. Please. We don't have a
 lot of time. Thank you.

MR. RHODES: Thank you very much. Emily 3 Bishop to be followed by Peter King. 4 5 AUDIENCE MEMBER: Hi everyone. Nice to 6 meet you. My name is Emily Bishop and I'm with 7 the New Yorkers against fracking Central New 8 I work with most of the people that York. 9 showed up today. We show up to, you know, 10 rallies, at your doorsteps, you know, we show 11 up in Albany. We do all of these things to 12 make you hear us. And it's been really a 13 pleasure working with everyone here. It's 14 really special and we're building a community. 15 And we've been fighting fracking and we 16 participate and we're here year after year. 17 Before that, when you released the regulations 18 on fracking, and we stopped that, that was us. 19 And that was the work of me an some other 20 people in this room. And that -- it's the 21 public. And we are your connection here, 22 right. Like, we got all these people here 23 today, because I don't remember seeing anything 24 in our newspapers that this was even happening

that didn't come from us, so... I believe

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1 that's part of a process that of all of us have
2 to be.

Anyways, I would like to let you know that 3 I will be 60 in 2050 and you all probably won't 4 5 be around. And I don't want to be in this room 6 in 2050 talking about the same stuff. I want 7 to be out in my community and I want to be installing solar panels on all these people's 8 9 homes. I want to stop working against you, I 10 want to start working for renewable energy in 11 plans that help me do that. I would greatly 12 appreciate it. And maybe some way that could 13 happen if NYSERDA actually had some money, 14 instead of putting all these pretty pictures in 15 your plan, that money could go toward hiring 16 community organizers like myself to actually 17 implement these plans, too. Implement 18 renewable energy, to implement solar in 19 Syracuse, for example. That would be really 20 great. I would work with you on that. Also --21 and you have to include us in this, right, 22 because we are the ones making the decisions 23 for your community. We have banned fracking, 24 we have resisted pipelines, we have solarized 25 communities. We have done things that we want

you to do, but we are doing it instead. And 1 2 this plan doesn't make it any easier for us to do that work. And we would like for the plan 3 to have that included. We want the plan that 4 5 includes jobs to increase. We want jobs that 6 include technicians and engineers and whoever 7 else is needed to hook up every city to renewable energy. And we would rather much 8 9 start working on actual solutions and continue 10 fighting something that threatens the health of 11 all of beings, especially our precious water resources. And if we can all get organized to 12 13 keep fracking out of our state, imagine what 14 we're going to do when you set it up so that we 15 actually implement renewable energy. We're the 16 ones that are going to do that work for you. 17 So if you make it easier for us to do it, than 18 imagine what we can do. If we can keep 19 fracking out of our state, which we're going to 20 keep doing and we're going to keep our energy 21 there until it's banned, you're going to be, at 22 least all of our organizers, ban fracking and 23 instead work toward renewable energy. What do 24 you want? Do you want us to keep trying to ban fracking, would you like all these people all 25

across New York State work on renewable energy? 1 2 Please, like serious. I don't want to be fighting fracking when I'm 60. 3 I'm 23, you know. I feel bad for all these people sitting 4 5 in this room that say I've been fighting this 6 for years. And thank God I have them to show 7 me the way because our government isn't doing 8 it, so thank you. Something else I want to 9 talk about is the accessibility for this 10 hearing. And I have some friends that use 11 wheelchairs, I'm very observant of 12 accessibility issues, especially on SUNY 13 campuses, which are not all ADA compliant, mind 14 you. Especially even this building, which is 15 brand new. And the parking lot situation, you 16 I mean it's going to be \$15 for me know. 17 parking here today, and I'm 23 and I have an 18 organizer's position. Like, I don't want to 19 spend 15 dollars to park to participate in a 20 public hearing. That's ridiculous. I also 21 don't want to have to print a lot of color 22 pages so that my community can physically read 23 the Energy Plan document. So if could you, 24 please, this is a specific request, that you could put the document in PDF form without the 25

graphics so we can print it and get it out to 1 2 our community. And I also think that the accessibility thing violates the open meeting 3 law section 103(b) that states public bodies 4 5 shall make or cause to be made all reasonable 6 efforts ensure that meetings are held in 7 facilities that permit barrier-free physical access to the physically handicapped as defined 8 in subdivision five of section 50 of the public 9 10 buildings law. And any parking, even the 11 parking garage that you told us to park in, we called your office several times in the past 12 13 three weeks, is located downhill making the 14 location inaccessible to the elderly or/and 15 disabled. So it's not like we had enough time 16 to even file that because I read the rules that 17 said we have to file before the meeting 18 happens, but we didn't have enough time to do 19 that. So even though this is an open meeting 20 law, we can't do anything about it. I hope you 21 notice that you're incompliance with the 22 opening meeting law. And thank you for 23 listening. And really I hope that you make the 24 right decision that I can work for you on 25 renewable energy instead of being the doorstep

demand banning of fracking. Thank you. 1 2 MR. RHODES: Thank you very much. Peter King followed by Rosalie Richter. 3 AUDIENCE MEMBER: Good afternoon. I'm 4 5 Peter King. I work on accessibility with 6 transportation in Syracuse with moving people, 7 transportation coalition, but I'm here as a private citizen. I live in Syracuse. I agree 8 9 with the bulk of the comments so far. 10 Especially those concerning -- regarding 11 natural gas impacts on climate, health and 12 eventual depletion and as well as the nuclear 13 concerns. I find the Energy Plan does 14 acknowledge the effect of this disaster, 15 especially in the urban center. However, as 16 other comments have observed, the vision and 17 basic data here seems lacking. The plan does 18 also acknowledge the climate crisis. However, 19 as many of the speakers have detailed, the plan 20 lacks ambitious and measurable targets. And 21 the current science regarding methane emissions 22 from different kinds of hydraulic fracking, I 23 agree that New York State's plan is cautious 24 regarding the fracking revolution. And, 25 however, as others observed, that the plan

fails to integrate public safety with energy 1 2 planning, especially regarding methane from hydrofracking and nuclear expansion to meet the 3 projected targets. The -- those risks are 4 5 simply not worth our continued investments. Т 6 encourage NYSERDA to tap your networks and 7 connect with the enormous potential for conserving energy and renewables while minding 8 9 public health. I have emphasized conserving 10 others merely efficiency, and as one example 11 the potential -- there's something called the 12 westernization health initiative on the federal 13 scale. They have done a lot of this 14 country-wide. And what they do is they combine 15 a lot of streamline, a lot of federal aid to 16 lower income residents with who have housing 17 with aid is another concern. And so they --18 those residents to do one-stop shopping so long 19 as they can remediate it while also insulating 20 their house in one stroke. So the state of New 21 York has engaged in this. We can also greatly 22 reduce dirty energy and greenhouse gas by 23 improving our public transportation. Transit 24 demand is getting increasing for the first time 25 both in New York and national, an the world,

1 actually. Transit can greatly reduce 2 greenhouse gas. And we need revival. You could expand electric motor focus to include 3 public transit as well as in Syracuse, for 4 5 example. We have a lot of natural gas busses, 6 which probably -- and though I haven't studied 7 this -- have the potential for a lot of leakage which contributes to ozone in an eventual urban 8 9 situation. Our neighbors in Quebec City have 10 recently converted to 100 percent electric 11 transit, I understand. Electric busses could 12 implement a meaningful and contagious change 13 for clean, open way to get people to work. So 14 I do urge NYSERDA to pursue the energy climate, 15 science and public health and enlist the many 16 citizen groups focusing on these challenges as 17 many people have urged you to do so today. 18 Thank you very much.

19MR. RHODES: Thank you very much. Rosalie20Richter to be followed by Alice Brumbach.21AUDIENCE MEMBER: Hello. I'm Rosalie22Richter. I'm 70-years-old, retired school23(Inaudible) and grandmother of four. I've

24 worked also in hospitals. I have spent many 25 vears working in this state and other states in

the mid Atlantic and New England. I've had my 1 2 fingers in environmental issues all these I have a son who is a farmer in this 3 years. state And I feel very strongly about these 4 5 I've had the privilege of being a war issues. baby and a child of the post-war era. But we 6 7 have the critical word here is crest. We have private interest energy that is paying a --8 9 that for which they're paying a huge price and 10 the time is now to switch gears. Fossil fuels 11 is a dinosaur of our time. It's time to move 12 onto energy sources that are less dangerous to 13 the environment. And we don't need the 14 government supporting the dinosaurs. We need the government supporting moving into a cleaner 15 16 more technological, enviromental sustainability 17 resources of energy. The plan, the Draft 18 Energy Plan, does state some admirable goals 19 for reducing the climate damage. But, as some 20 people here have pointed out, there are no 21 teeth in this, in this draft. And it has not 22 been informed by the many, many public and 23 scientific responses to the draft for fracking. 24 Legislation has not been informed by the 25 hundreds and thousands of letters for the

fracking infrastructure that had been submitted 1 2 to the state by the citizens here and from all over the state. Cannot believe that this 3 document was put together without considering 4 5 the mass of citizen comments that's already 6 available to all of you. I would also share my 7 concern about the lack of information about this meeting. I only heard about this meeting 8 9 days ago. And I have to apologize if my 10 comments are not organized because I haven't 11 had time to put together a response to this. 12 And it was difficult getting here. And there are some people who would like to respond. You 13 14 have seen in the rallies that there are 2,000, 15 4,000 people who turn up to this. But this is 16 not convenient. And as citizens we have a 17 right to know when a citizen hearing for 18 citizens is being provided. We shouldn't have 19 to work to find it out. It should be in our 20 newspapers. It should be telegraphed to all of 21 us, okay. And, again, look at those 22 regulations, they do not -- the draft plan, it 23 doesn't address major threats to our 24 environment. It leaves out so many. It has 25 omissions, no terms of global concern,

1 financial concerns, state concerns, our local 2 community concerns and our family, our children, our grandchildren. These things are 3 not being addressed. First of all, the major 4 5 threats of global warming, and this is 6 something that is impacting the globe. I don't 7 think I have to raise the statistics or anything, that's been well done by the people 8 9 here already today. There's also the threat to 10 our water supply. And I'm not actually talking 11 about just the water supply in our fresh water, 12 but also the oceans. Because we have a huge 13 problem now with the sequestration of CO2 in 14 the oceans, which is using it to acidify and it's already effecting the ability of plants 15 16 and animals in the oceans to reproduce 17 themselves because of the acidity. And also 18 with such a small portion of the world water 19 pollution threatening resources in this state. 20 Again, the statistics have already been 21 represented. And then there are all the collateral damage through pollution. And I'm 22 23 not just talking about the pollution, the air 24 pollution, the methane, all those that mix up

all the chemicals that's going into the air.

But there's -- there's damage to the people who 1 2 live right next to these things. One previous speaker said that 15 million people who live 3 within one mile of these fracking wells. And 4 5 we're -- and these -- and this plan would not 6 prevent hundreds and thousands of gas wells in 7 the state. It's the same problem. We know from research what it causes. That the 8 9 emissions around fracking stations cause birth 10 defects, they cause allergies, they cause --11 they cause breathing problems and so forth, 12 cancer and increase cancer risks and so forth. 13 There's a great deal of collateral damage. Ι 14 could go on and on. But that's the thing I 15 want to bring up is that while we've been 16 addressing all these issues with reasonable 17 argument and statistics and scientific 18 information, there's another huge price to pay 19 is that the emotions that people are dealing 20 with. I'm a Midwestern person, I'm optimistic, 21 I'm very stable emotionally, but you can see 22 where I'm at right now. I'm angry. I'm afraid 23 for my children and their grandchildren. I 24 feel a tremendous amount of fear of what 25 happens to the planet and animals on it. I am

deeply cynical about the influence of the 1 2 fossil fuel industry on this process of trying to regulate and manage our energy systems. I 3 have a lot of sorrows. And I think that 4 that -- those feelings are all on the negative 5 6 side. But I'm telling you, underneath all 7 those is a great deal of love for the planet. 8 And that love that makes me stick to this fight 9 and stand and, if necessary, lie down under 10 some of those tractors and make them stop. I 11 think it's time to put our lives on the ground 12 for this issue. Thank you. 13 MR. RHODES: Thank you very much. Alicia 14 Brumbach followed by Rachel Larson. 15 AUDIENCE MEMBER: I serve as the executive 16 administrator for the New York Biomass Energy 17 Alliance and the board of directors. The New 18 York Biomass Energy Alliance is a coalition of 50 individuals, businesses and organizations 19 20 working together to enhance support, 21 understanding and use of sustainable produced 22 farm and forest biomass as a source of 23 renewable energy. ESF Department of Forest and 24 Natural Resources Management is one of our 25 We'll submit our formal comments at a members.

1 later date.

2	Our sustaining member, Re-energy,
3	headquartered in New York owns and operates
4	biomass to electric generation facilities in
5	four states. Three of their facilities are in
6	New York's north country, the Chateaugay
7	facility in Franklin County, the Black River
8	Facility at Fort Drum facility and the
9	Lyonsdale facility in Lewis County. These
10	three facilities have a combined name plate
11	capacity of 103 megawatts, enough electricity
12	to serve 96,000 homes. When all three
13	facilities are operating, they purchase more
14	than 24 million dollars of sustainable
15	harvested fuel from local suppliers and support
16	more than 500 direct and indirect jobs in
17	northern and Central New York.
18	Our sustaining member, New England Pellet,
19	owns and operates two state-of-the-art wood
20	pellet manufacturing plants in Schuyler and
21	Deposit. The two plants produce 170,000 tons
22	per year of wood pellet fuel, sufficient fuel
23	to heat over 50,000 New York homes and
24	businesses and displace the consumption of
25	nearly 20 million gallons of imported heating

oil. New England Wood Pellet employs 40 people
 directly and indirectly supports over 200
 additional New York jobs.

In the past seven years these two 4 5 companies have invested more than 95 million 6 dollars in New York. Re-energy and New England 7 Wood Pellet are part of a larger bioenergy industry, including ACT Bioenergy, Mesa 8 9 Reduction Engineering and Processing, Curran 10 Renewable Energy, and Cogen Power Technologies, 11 among others, that has created and will 12 continue to create permanent jobs and revenues 13 in New York state.

We appreciate NYSERDA's recognition that the bioenergy sector is a critical part of the state's energy future. It is an important part of a diverse renewable energy portfolio. It reduces our reliance on fossil fuels, creates jobs, and enhances forest health.

20 Of all renewable energy choices, bioenergy 21 offers the greatest long-term employment and 22 positive rural economic impact. As a rule of 23 thumb, each MW of biopower or biothermal 24 supports almost five full-time jobs. One 25 direct job in the facility and four indirect in

surrounding forests and communities. Rural 1 2 areas of the state are recognizing the economic and enviromental value of biomass derived 3 energy. For example, sustainability plans 4 recently completed in the North Country, Mohawk 5 6 Valley and Southern Tier all recognize and 7 place a high priority on the use of sustainable sourced biomass for heating homes and 8 businesses, electric generation and combined 9 10 heat and power.

11 We agree with the draft plan's 12 characterization of bioenergy as possessing 13 some of the highest growth opportunity in the clean energy economy. We further agree with 14 the plan's recommendation to establish smart 15 16 energy technology hubs involving collaboration 17 between various institutions in the research 18 and development chain.

According to the draft plan, gigawatt hour contributions by wood based biomass electricity generators have decreased annually since 2008. The recent contract awarded to Re-Energy's Fort Drum facility under the renewable portfolio standard is likely to increase annual contributions. But continued RPS contracting

is critically important for the continued 1 2 viability of biomass in the electricity generation sector. In order to address this 3 issue, we believe that the state should focus 4 5 equally on protecting existing resources as it 6 does on encouraging the building of new 7 This approach is more cost resources. effective as well. Existing generation does 8 not face the risks and uncertainties intrinsic 9 10 to new project development such as permitting 11 and siting. 12 Biomass electricity generators are 13 uniquely vulnerable to the current markets of 14 low wholesale energy pricing. As is the

15 experience with at handful of biopower 16 facilities throughout the state when sufficient 17 RPS revenues do not exist such facilities in 18 the low wholesale market, facilities are 19 shutdown. These facilities need an adequate 20 market through the RPS to monetize the value of 21 renewable attributes. Without continued 22 support of existing facilities, the state's 23 renewable energy goals will not be met.

24 We are heartened that the Public Service 25 Commission is currently considering a petition

to chance contracting methods for the main tier 1 2 of the RPS and to guarantee more certainty in solicitation frequency. In order to ensure the 3 continued viability of existing facilities, we 4 5 feel that the adopted state Energy Plan should 6 point to measures that herald New York's 7 support of renewable baseload power, such as providing greater incentive-level predicability 8 9 and project revenue certainty for existing 10 projects in any such program as hallmarks of 11 New York's commission to this industry. 12 The New York Biomass Energy Alliance is 13 also heartened that the draft plan calls for 14 reduced reliance on petroleum products for 15 heating buildings and increased transportation 16 alternatives. However, the draft plan does not 17 adequately address the enormous potential for 18 biomass to help reduce dependence on imported 19 fossil heating such as heating oil and propane. 20 New York homeowners and businesses export 21 \$5 billion of wealth annually by their heavy 22 dependence on these non-renewable fossil fuels. 23 Biomass fuels, such as wood pellets, chips, 24 logwood and bio-based liquid heating fuels can

greatly diminish this outflow of wealth and

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support a strong rural economy. The draft plan
 does not acknowledge this.

In January Govenour Cuomo unveiled his 3 Renewable Heat New York initiative in his 4 5 State-of the-State address and plan. This high 6 level recognition by New York's chief executive 7 is symbolic of growing awareness of the roll that the biomass can play in helping New 8 9 Yorkers to heat sustainable and affordable. We 10 eagerly await the completion of NYSERDA's New 11 York biomass heating roadmap which will chart a 12 strategic plan on how to most effectively 13 harness this resource to address heating needs 14 in the state. The plan drafters would do well 15 to review NYSERDA's roadmap when it is released 16 in April. Thank you for the opportunity to 17 come.

18 MR. RHODES: Thank you very much. William19 Huston followed by Dan Rapaport.

AUDIENCE MEMBER: Hi there. My name is William Huston. I live in Broome County and the heart of the sacrifice zone of fracking. So I just picked up on one statement that somebody previously stated, and that's glaring omissions. I agree with that. The two glaring

omissions that I can see also embodied in your 1 2 implicit also call for more natural gas infrastructure. I also want to echo the 3 comments that call this natural gas is really a 4 5 misnomer. If we have to smash rock a mile 6 under ground that way (indicating) in order to 7 get the stuff, with high explosives, HDE is like one of highest explosives known to man, 8 9 it's tipped with depleted uranium in the 10 hydrofracking, that's not a natural process. 11 That's an extreme process. What you're calling 12 for is extreme energy. And it's a lot more 13 unnatural than I think wind and solar. I think 14 that that's been said today. I also want to 15 briefly just comment about accessibility. You 16 have heard that a little bit today. I had to 17 walk a mile carrying about 40 pounds worth of 18 equipment. And I'm like kind of an old guy, so 19 I do live a sedentary life. Maybe I just 20 needed the workout. You know, that's probably 21 okay. I have a big problem with the 22 accessibility of this hearing. I go to a lot 23 of hearings and I haven't had to walk a mile in 24 a long time. Public transportation is one of 25 the glaring omissions. And I want to ask you

to look at that because this is a big switch in 1 2 the first part of the earlier part of the 20th century. Where, in fact, you can even Google 3 It was a conspiracy between General 4 this. 5 Motors and Firestone to actually buy up the 6 light rail, you know, the town where 7 Binghamton, New York where I've lived for about the last 15 years. There's still evidence of 8 9 trolly tracks on certain roads in my hometown in New Jersey, trolly tracks paved over. We've 10 11 ripped out, you know, it's -- that makes the 12 United States less sustainable than, you know, 13 some of the most, you know, rural third-world 14 areas in Europe. So we're really backwards by ripping out light rail. Two glaring omissions, 15 16 peak oil and global warming. Let's talk about 17 that briefly. If we get to five degrees C -- I 18 hope you're all taking notes and not like just 19 writing a grocery list there. If we get to 20 five degrees C, there are certain feedback 21 loops that happen in the environment that can 22 actually bump it up to ten degrees C. At ten 23 degrees C mass extinction. 95 percent of all 24 living beings gone. This is in the geologic 25 record. So we are -- we are really at a crisis

movement. We need radical action from you all. 1 2 And what we're seeing is more reliance on fracked gas, and it's really not acceptable. 3 And like others have said, when mass extinction 4 5 is on the horizon. There are a lot of people 6 here, and I'm one of them, that will put our 7 bodies on the line in order to protect present life and future generations. And I live down 8 9 wind and down stream of fracked gas wells in my 10 water shed. Fracking is prohibited in the 11 proposed New York regulations in the New York 12 water shed with a four thousand foot setback. 13 I have -- I have 96 fracked wells in the middle 14 of my water shed, my upstream water source right now. There are 400,000 New Yorkers that 15 16 are downwind and downstream of hydrofracking 17 operations in Pennsylvania. And this gas and 18 these infrastructure projects that you're 19 proposing is only going to -- I've seen the 20 devastation in Pennsylvania. And you should 21 come and see it for yourselves. Come to 22 Bradford County where my family is from. Come 23 to Susquehanna County and just see what it's 24 like. So, please take this back. Have 25 additional public hearings with greater

accessibility to give us more time to analyze
 this and study this. And we want a true
 renewable future for New York. Thank you.
 MR. RHODES: Thank you very much. Craig
 Lazzar.

6 AUDIENCE MEMBER: Hello members of the planning board. My name is Craig Lazzar and 7 I'm a graduate student working towards a master 8 9 of professional studies degree from the 10 environmental studies department here at ESF. 11 I earned my bachelor of science degree here at 12 ESf in 2008. In April of 2008 I was awarded 13 the title of renewable energy scholar by a national campaign called Presidential Forum on 14 15 Renewable Energy.

16 As a child growing up in Central New York 17 I suffered from asthma attacks. And I know of 18 the hardships and worries that living with 19 asthma imposes on families. Empirical evidence 20 shows a strong correlation between fossil fuel 21 emissions from electrical power plants and 22 asthma and other respiratory ailments for the 23 young and old. The Draft Energy Plan 24 acknowledges these impacts and even highlights 25 the magnified impact that air quality has for

residents of New York City, yet the Draft
 Energy Plan dedicates New York State to the
 same old dirty energy technologies.

We have power sources available to us 4 5 right now that don't burden the public and 6 government with compound, chronic healthcare 7 costs associated with breathing air containing fossil fuel power plant emissions. Healthcare 8 costs associated with fossil fuels are a burden 9 10 to the public and are a free, implicit subsidy 11 to fossil fuel businesses. There is no 12 regulatory structure to address this tragedy of 13 the commons and we all suffer for it with every 14 breath. Not only do we desperately need steep 15 investments in renewable, low carbon energy, 16 but we need to stop allowing fossil fuel 17 companies to socialize the negative impacts of 18 their business model. We need to end actual, 19 legal and clearly unnecessary subsidies to the 20 most profitable corporations to ever exist on 21 earth. Part of that struggle is going to 22 include an investment and development package 23 for renewable energy that matches the 24 preferential treatment that has historically 25 gone to fossil fuel projects. This will begin

to introduce competition in the energy
 marketplace. Competition which has been absent
 for far too long harming the health and
 development not only of New York but the
 nation.

6 New York has not only the capability but a 7 responsibility to lead the nation towards renewable energy. Over 60 percent of our 8 9 electricity already comes from low-carbon 10 sources. For New York, carbon neutrality or 11 even carbon capture s low-hanging fruit. An 12 80 percent reduction target by 2050 is an 13 embarrassingly inadequate goal. I'll be 65 and hopefully retired by then. I think it's safe 14 15 to say that the members of the planning board 16 are -- with maybe one or two exceptions -- are 17 unlikely to ever see the fruits of such a plan. 18 By 2050 it will be too late to do anything at 19 all about climate catastrophe.

As the home of one of the world's most important global cities, New York has a lower opportunity cost and higher profile for developing and demonstrating the benefits of renewable low-carbon energy. The prosperity of every New Yorker is harmed by this failure to

jump at the opportunity for immediate and deep 1 2 investments in wind and biomass power over the next decade. We need to be far more proactive 3 than this to even begin to address any of the 4 5 problems that are mentioned in the very last 6 pages of the plan under the heading Impacts and 7 Considerations. This last section of the plan is almost entirely a self-referential 8 9 indictment of everything that comes before it. 10 I have several professors that would no doubt 11 fail me for presenting such a 12 self-contradictory product as a class project, 13 and they would be right to do so. 14 Most dismaying is that the Energy Planning 15 Board has underutilized the resources available 16 within New York State in drafting this plan. 17 And that is a shame. Just in Central New York we have the nation's oldest environmental 18 19 science university, ESF; the new Golisano 20 Institute for Sustainability at the Rochester 21 Institute of Technology; and Cornell University 22 and Cornell Cooperative Extension, just to name 23 a few. It would be difficult, if not 24 impossible, to point to any other state in the 25 union and find such a unique and robust

collection of enviromental scientists and
 wisdom as New York State has. And it's a shame
 that this expertise is not explicitly
 celebrated and utilized in the 2014 Energy
 Plan.

New York has a technical and policy 6 7 development expertise within its own borders to lead the nation away from carbon intensive and 8 9 increasingly destructive fossil fuel power. 10 Right here at ESF there are pioneering and 11 innovative solutions to harnessing energy from 12 woody biomass. This is known colloquially as 13 the Woody Biomass Program which concentrates on the cultivation of shrub willow due to its 14 15 incredible inability to filter waste on 16 marginal soils while maximizing harvestable 17 biomass. ESF scientists have developed methods 18 that promise higher energy returns than what we 19 get when compared to a fossil fuel energy 20 life-cycle costs. There is strong evidence 21 that, however, that though biomass technology 22 has its own unique limitations, just like 23 fossil fuels do, it promises more value to New 24 Yorkers. It promises us a better value in jobs 25 and health and a cleaner environment and a

1 greater economy. It promises more adaptable 2 infrastructure capable of merging with the 3 existing grid without the enormous upfront 4 investments required to expand natural gas 5 infrastructure.

6 Wind power, likewise, offers New York the 7 opportunity to address many ongoing energy 8 issues. We need to double, and better yet, 9 triple investments in renewable wind energy 10 over the next five years. Offshore wind offers 11 especially attractive aspects for New York City 12 by investing in the ability to harness the 13 power of offshore wind. New York City could circumvent the electrical bottleneck that 14 15 exists in trying to move upstate energy to Long 16 The installation of offshore wind at Island. 17 suitable sites near New York City could reduce 18 energy prices in the city, and even across the 19 state, as the demand for energy is from upstate 20 is reduced by offshore wind energy. All of New 21 York would gain prosperity through cheaper 22 energy. Wind turbines last for 20 to 30 years. 23 Gas pipelines last longer but absolutely commit 24 us to an already overexploited and chaotic 25 natural gas marketplace where costs are only

likely to go up and fluctuate more severely. 1 2 MidAmerican Energy just announced that the State of Iowa approved a groundbreaking in 3 November on a 500 megawatt wind farm. 4 The 5 largest single site in Iowa history. It calls 6 for 218 wind turbines spread out over 70,000 7 Dubbed the Highland Wind Energy acres. Project, it's part of a 1.9 billion dollar 8 9 expansion of Iowa's wind generating capacity. 10 They plan to have the project completed by 11 2015. Not 2050. The one billion dollar green 12 bank and 2050 carbon reduction target that is 13 created in the draft of the New York Energy 14 Plan is frankly, unfortunately, pitiful compared to Iowa's investment in infrastructure 15 16 alone. I think that if Iowa can do it, then we 17 can definitely do it. We have no excuses left. 18 It might be a challenge to put a stock price on 19 wind resources or shrub willow, at least at 20 first, but the dividends paid back to New York 21 through investments in a low carbon green 22 economy and updated energy grid are real and 23 they're waiting for us if we only reach out to 24 seize the opportunity. Thank you.

25 MR. RHODES: Thank you very much.

AUDIENCE MEMBER: Thank you for your time. 1 2 I used to be one of those folks that was --3 wanted to go to meetings. I wanted to go to public meetings. I graduated with a planning 4 5 degree. I went out into the world and I got my 6 hundred thousand dollar grant for bicycle and 7 intermode transportation. And it was funded 8 improperly and I could never sign my name again 9 on another grant from the federal government. 10 For me, personally, I wouldn't do it because my 11 grandfather set the tracks for honesty in 12 business. He was a senior agriculture advisor 13 to the White House. I'm embarrassed for 14 myself. I embarrassed for what has happened. 15 I have worked in mergers and acquisitions. I'm 16 not going to reiterate what everyone said. 17 Fact is, these guys have billions of dollars to 18 waste. And you know we've got a moratorium and 19 we're fleecing them. We're fleecing these 20 companies because we're not -- I don't see it 21 happening. How could -- with all this. How could we not be fleecing these companies. 22 23 Sure, we'll maybe do it. We'll maybe do it. 24 Oil and gas, we'll -- when you got one propane 25 quy saving I'm improvished with propane, we ned

it now. Freeing cold trailer parks. And I'm 1 2 embarrassed to say I've done the research. That's -- the majority has not been heard. 3 Ι don't know. I mean I bowed out of this. I 4 5 tried to bow out of the -- this fully. And the 6 next thing you know I was surrounded by a SWAT 7 team and called an terrorist. So I have to lay low. But I told you my experiences in the 8 9 mergers and acquisitions from 2008 and onward. I know what it's like to have Chesapeake Bay 10 11 come up here and say we are going to quadrant 12 off an area to get these people to -- simply 13 these people do it and we're getting \$5,000 commission a lease to do it. So thank you. 14 15 MR. RHODES: Thank you very much. Renee 16 Vogelsang followed by Carol Chock. 17 AUDIENCE MEMBER: Hello. I have a couple 18 difference statements to read. I hope to get 19 it in five minutes. My name is Renee 20 Vogelsang. I'm with the organization New 21 Yorkers Against Fracking. I'm actually from 22 the Syracuse, New York region, currently living 23 here in Syracuse, New York. I was going to red 24 a statement from Jean Kessner,

25 Councilor-at-Large for the City of Syracuse.

she couldn't get here because she couldn't find 1 2 a parking spot and she has trouble walking up here and she was here on a lunch break, so she 3 was extremely disappointed that she couldn't 4 make it up here. I would like to reiterate 5 6 that the accessibility of this location was 7 extremely poor, the parking was extremely poor. As community organizers we host events that 8 9 have parking lots right next to other events 10 and handicapped accessibility and so on so that 11 people can come and participate. I just want 12 to reiterate about that. But her statement 13 goes as far as -- and I'm here speaking on 14 behalf of and I will read. "I am Jean Kessner, 15 Councilor-at-Large for City of Syracuse. I'm 16 here today speaking on behalf of elected 17 officials from every county in New York State 18 who are united in advocating to continue the 19 moratorium on fracking until and unless health 20 studies prove that fracking will not be harmful 21 to human or environmental health. EOPNY will 22 file a longer statement separately to further 23 explain EOPNY's view of the state energy plan 24 which, in a word, we find lacking.

25 While setting forth and admirable goal of

80 percent reduction in greenhouse gasses from 1 2 1990 levels by 2050, the plan lacks a strong roadmap for how we get there. It sets no 3 benchmarks or clear steps. Inexplicably, the 4 plan forecasts only anemic growth in renewable 5 6 energy sources and instead promotes the 7 widespread expansion of natural gas. Ιt actually describes natural gas as a, guote, 8 "Clean fuel." Natural gas is a fossil fuel. 9 10 Burning it contributes to climate change.

11 Clean fuels are renewable, like wind, 12 hydro and solar. According to this plan's own 13 documentation, New York State more than doubled power generation from wind and solar between 14 15 1990 and 2012. That is a far bigger gan than 16 from any other power source. Although there 17 are some good initiatives in the plan relating 18 to renewables, we need more specific and more 19 significant commitments to expanding the role 20 for renewable.

21 Contrary to this, unfortunately the plan 22 predicts that natural gas production in New 23 York State will triple by 2030, intimating that 24 New York's moratorium on fracking will be 25 lifted. It indicated that production may well

be even greater in the state if permitting 1 2 difficulties are reduced. Further, the plan promotes increased infrastructure for gas 3 transmission and distribution, a misguided use 4 of our state's resources and investments. 5 6 Fracking is not clean. A significant and 7 rapidly growing body of science shows that fracking poisons water, air, land and 8 9 contributes to climate change. It releases 10 methane, a potent greenhouse gas, which brings 11 me to my next point. 12 Just what are our goals here? Again, the 13 plan reaffirms New York's goal of reducing total greenhouse gas emissions 80 percent from 14

15 1990 levels by 2050. Yet this plan only 16 commits to measuring one greenhouse gas, carbon 17 dioxide, before 230. This ignores methane 18 which is 34 times more potent greenhouse gas 19 over 100 years and 86 times more so over 20 20 years. Significant amounts of methane are 21 leaked during the gas drilling and fracking 22 process and transporting natural gas.

New York needs a plan that charts a course
for the future, that sets aggressive targets
for production of renewable energy and for

greater energy efficiencies economy wide. A 1 2 plan that tightens building codes and ups standards on appliances and aggressively 3 enforces the rules. We need to set our sites 4 5 high and lead the nation away from its 6 dependence on fossil fuels. This will set us 7 on a brighter and healthier path for the future and it will create for more jobs than continued 8 9 reliance on dirty fossil fuels. And thank you, 10 Jean Kessner on behalf of EOPNY. Once again, 11 over eight hundreds elected officials in the 12 state. 13 MR. RHODES: Sorry? 14 AUDIENCE MEMBER: Jean Kessner. J-e-a-n 15 K-e-s-s-n-e-r. 16 MR. RHODES: Thank you. 17 AUDIENCE MEMBER: So I want to just read 18 my own personal statement, so I hope that is 19 allowed. 20 MR. RHODES: It's not a problem, we 21 understand. 22 AUDIENCE MEMBER: So, once again, my name 23 is Renee Vogelsang. I work with New Yorkers 24 Against Fracking and Frack Action. I'm from

Camillus and I live in Syracuse, New York.

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1 don't want to reiterate too much. You know, 2 we're against the gas infrastructure bill in New York. We're against gas production in New 3 York, importation of gas into New York due to 4 5 the effects of methane on our climate. And we 6 want the government to take bold steps in 7 renewable energy. But we're -- you know what I want to say right is natural gas is a 8 9 transition fuel monitor that's been 10 manufactured by the gas industry who has a 11 monetary relationship with the present 12 administration and the mainstream media. We 13 can't afford to look away to the fact and 14 science and the personal stories of people 15 suffering from natural gas fracking and 16 transportation across the country. Those who 17 work at the head of the gas industry will only think about their timeline and don't care what 18 19 consequences are being made or are in total 20 denial. As leaders we're calling on you to do 21 your job and lead. Something my colleague 22 Julia Walsh, who is here and has lived through 23 her work, is that it takes a village to raise a 24 nation. And that's exactly where we are in New 25 It's going to take New York State to York.

raise this entire nation. I understand that we 1 2 need the politics for renewable energy. I'm telling you today that we are working on it, 3 but we need you to meet us halfway. We can't 4 5 do it without you just as you can't do it 6 without us. And, finally, I would like to say 7 that we need the heart for human lives and 8 planetary survival back in our government and 9 in our community leaders. I'm calling on every 10 young person, female person, male person, all 11 other persons who actually care about our 12 survival, to run for office and other 13 leadership positions. Because of this planning 14 board, if this administration is not willing to 15 do the right thing, than we're going to do the 16 right thing. 17 MR. RHODES: Thank you very much. Carol 18 Chock to be followed by Thomas Starkey.

19AUDIENCE MEMBER: I'm Carol Chock, a20legislature from Tompkins County where I21represent 7,550 constituents in District 322mayor election term residential areas adjacent23to Cornell University. I chair the planning24energy and environmental quality committee25where we are actively involved in

multi-projects to reduce greenhouse gas 1 2 emissions in our county, encourage production and build energy efficient housing and former 3 chair the facilities and infrastructure where 4 5 we built lead equivalent facilities, install 6 solar (inaudible.) I'm also voice chair of our 7 economic develop committee where we look at economic impact of energy decisions. Thursday 8 9 night the Tompkins County Legislature passed 10 this resolution providing comments and 11 recommending important revisions to the 2014 Draft New York State Energy Plan. It came out 12 13 of the bipartisan committee. Passed the 14 legislature ten to four with the only 15 difference of opinion on our legislature 16 percentage by which methane CH4 is responsible 17 for greenhouse gas emissions that contribute to 18 climate change and CO2. So we were unanimous 19 in most of what we passed. We all agree we'll 20 not be able to achieve our own over New York 21 State's target in greenhouse gas reduction on 22 the current course. We were unanimous that New 23 York State must get serious about finding 24 another path. Point of agreement, 80 by '50 25 target. 80 percent I think by 2050 as a target

is a good idea. All carbon equivalent must --1 2 we must change methane and other emissions as well as set the bar for our regulations. 3 Please see the recent research from Cornell 4 5 University and other places, Jacobson, Jackson 6 Morris who wrote about -- who is here who wrote 7 about New York renewable standards and what was cited in our regulations. There must be 8 9 interim targets. A resolution point that New 10 York State requires us, when we apply for 11 grants, to have an achievable target when we 12 receive funding. For example, for New York 13 State, only a cleaner, greater community plan. 14 But it didn't include such targets for itself. 15 The name plan for this document says is 16 regulations is pretty much a misnomer. We say 17 it more politely in the resolution. While it 18 establishes some admirable goals and makes some 19 predictions based upon a continuation of 20 business as it has been, it is not a new plan 21 in the modern sense of words in which future 22 direction is set and alternative directions are 23 made that would depend upon implementation of 24 the new set of initiatives. Our resolution 25 calls for a final plan that would be worthy of

Tompkins County is not alone in 1 that name. 2 deciding that energy policies are worthy of our time. Elected officials at all levels and in 3 our municipalities and in other counties across 4 5 New York State are looking at not only fracking 6 but wide energy decisions. Tompkins County 7 council definitely has a sustainability energy task force. There's now elected officials net 8 worth consisting of 800 and some elected 9 10 officials at levels throughout the state. 200 11 municipalities have rewritten the plan using 12 control thinking about energy use and looking 13 at that energy decision effect not only our 14 energy but our economics. Bipartisan elected 15 officials study policies, institute clean 16 energy programs on local levels. And emissions 17 market concludes that fossil fuels, including 18 natural gas infrastructure, are not good for our economy. Like the numbers don't work. 19 20 Damage from an extreme storm cost us in Tompkins County over 500,000 this year. And if 21 22 you count the recent salt and storms, I think 23 we're probably getting closer to a million 24 probably. Tax income doesn't cover increase 25 set costs for public safety for some of the

things that we're talking about. Services, it 1 2 doesn't cover the cost for additional services for public health, ensure public health in our 3 community. We face uncertainty and pricing. 4 5 We just encourage you to read our resolution 6 and create a final plan in the spirit in which 7 planning has been taken into consideration in this great State of New York. Thank you. 8

9 MR. RHODES: Thank you very much. Thomas 10 Starkey followed by Jackson Morris.

11 AUDIENCE MEMBER: Good afternoon. My name 12 is Thomas Starkey and I'm a junior here at ESF. 13 I believe that the New York State Draft Energy 14 Plan has the potential to be a great document. 15 It could put the state on the right track to 16 lead the right energy development, and it 17 could. Due to the underlying motifs of the 18 plan, it could be less conflicting. Makes it 19 hard to determine an appropriate middle ground 20 for everyone that everyone will agree upon, 21 especially when it comes to the upcoming role 22 of natural gas. According to the EPA pound for 23 pound the comparative impact of methane on 24 climate change is over 20 times greater than 25 vou carbon dioxide over a hundred year period.

If we release carbon emissions by increased 1 2 carbon methane, we'll be back to square one of the fastest way to increase natural gas 3 consumption for New York would be through 4 5 hydrofracking. The long-term negative and 6 environmental consequence of hydrofracking far 7 outweighs the short-term economic advancement. 30 percent of methane emissions come from 8 9 natural gas and petroleum. That is the result 10 of this process. Look at Onondaga Lake. 11 That's a -- that's a federal funded toxic waste 12 site. New York has so much clean water 13 available. We don't want to have to be going 14 through the same process of cleaning up our 15 mistakes from this path in the future. These 16 emissions will only get into the future and 17 they will still be confronting the same 18 environmental issues we have today further done 19 the road. Let's make the right decision and 20 ban hydrofracking. Thank you. 21 MR. RHODES: Thank you very much. Jackson 22 Morris followed by Kim Michaels. 23 AUDIENCE MEMBER: I'm showing my age that 24 I'm not reading off my phone, I have paper.

25 Good afternoon. My name is Jackson Morris.

I'm a senior energy and climate analyst at the 1 2 Natural Resources Defense Council, an international nonprofit enviromental 3 organization with our headquarters here in New 4 York State. NRDC has more than 1.4 million 5 6 members and online activists, including more 7 than 110,000 in New York State. Since our founding in New York 1970, our lawyers, 8 9 scientists and other environmental specialists 10 have worked to protect the world's natural 11 resources, public health and the environment. 12 NRDC's top institutional priority is curbing 13 global warming and building the clean energy future. 14

15 For two decades NRDC has worked to scale 16 up renewable energy and energy efficiency in 17 New York State as the key strategy for fighting 18 global warming, protecting public health, 19 lowering New Yorker's energy bills and creating 20 jobs. As the result of efforts by many 21 stakeholders and policies adopted by the state, 22 New York has scaled up its clean energy efforts 23 considerably. A decade ago New York had just 24 48 megawatts of wind power, today, after a 25 decade of our successful renewable portfolio

standard program, we have a 1.8 gigawatts of 1 2 wine. More than 37 times more than we had with some of the largest projects located right here 3 in Central New York. Just four years ago New 4 5 York had minimal amounts of solar power 6 installed. Today, after the first phase of New 7 York Sun Program, not counting the many installations that occurred in 2013, we have 8 9 nearly 200 megawatts and are finally in the top 10 ten states for installed solar. And yet we 11 have far to go before we realize our full 12 potential for clean energy in New York State. 13 And the aftermath of Hurricanes Irene and Lee 14 and Superstorm Sandy, we understand more 15 clearly than ever how high the stakes are in 16 the struggle to move away from fossil fuels to 17 clean energy. So the conversations that we are 18 having through the State Energy Plan process 19 are crucially important as will be policies 20 that New York State adopts moving forward. 21 I appreciate the opportunity to comment on 22 the 2014 New York State Draft Energy Plan 23 today. My testimony is broken between four 24 parts. At the outset, we would like to thank

25 NYSERDA for their efforts to produce a solid

draft plan that synthesizes a lot of useful 1 2 information about New York's current and projected energy mix and includes some 3 thoughtful recommendations. However, moving 4 5 forward, we urge New York State to include more explicit comments to specific clean energy 6 7 goals and policies. These will be needed to meet our emissions reduction, clean energy and 8 9 environmental and public health goals. In 10 particular we strongly urge that the final plan 11 include a 2030 modeling run that captures a 12 vast energy efficiency and the renewable energy 13 potential the draft itself references. A full 14 43 percent of electric demand from energy and 15 comparable numbers from renewables. Doing so 16 results in a starky different energy mix than 17 currently projected.

One: The draft plan includes a laudable long-term emissions target. An 80 percent reduction in greenhouse gases by 2050 but needs interim goals/mile markers to ensure we get there.

New York should establish near and
 mid-term targets for 2018 and 2021 to help
 achieve the year-over-year economy-wide

greenhouse gas to meet Govenour Cuomo's long-term goals. For example, a 2018 target of a 14 percent reduction from 2011 levels and 20 percent by 2021 would ensure the state is on the appropriate glide path to reach the 80 by '50 goal.

In addition, targets should be based on
actual carbon dioxide equivalent reductions,
not carbon intensity as stated on Page 28 of
Volume One. Instead, goals must be set in
terms of actual tonnage reductions of CO2
equivalent to provide an accurate measurement
of policy performance.

And carbon should be clarified to refer to 14 15 CO2 equivalent. Other greenhouse gases such as 16 methane are significantly more potent than 17 carbon from a climate forcing perspective over 18 shorter time periods. And the prevailing 19 science has illustrated that a comprehensive 20 approach to greenhouse gas reductions is 21 necessary to mitigate climate change. Thus, we 22 recommend that the final plan incorporates that 23 change in order to ensure adequate attention is 24 paid to mitigating those high impact greenhouse gases in addition to carbon dioxide. 25

Two: Extending and expanding programs for 1 2 clean renewable energy efficiency will play a central role in meeting these ambitious but 3 achievable greenhouse gas goals. 4 5 Energy efficiency in the draft plan 6 includes a state commitment through 2020 to 7 energy efficiency programs, which are currently set to expire in 2015. While this time horizon 8 9 is essential to ensuring certainty for 10 utilities, building owners, contractors to 11 invest in energy efficiency, this commitment 12 must be coupled with targets and dollar budgets 13 to capture all cost effective energy 14 efficiency. Based on historical performance 15 and various analyses, a goal of meeting roughly 16 20 percent of forecasted demand in 2025 through 17 energy efficiency, should be included in the 18 final plan along with comparable programs 19 targeting end use natural gas efficiency. 20 Programs should also be designed to target sectors such as affordable multi-family housing 21 22 that have traditionally been undeserved and 23 represents a vast reservoir of cost-effective 24 efficiency, a sector in which the value 25 proposition for energy savings in heightened

low-income families can spend up to 20 percent 1 2 on their income on energy, compared with only four percent for the average household. 3 Building codes and state appliance 4 5 efficiency standards must be updated more 6 regularly as well as aggressively enforced. 7 For so long this area has suffered from lack of funding and political will to follow through on 8 9 stated commitments. As buildings account for 10 the lion's share of energy demand in the state, 11 72 percent of primary energy use in 2012, 12 strengthening codes and standards will spur 13 economic growth by reducing overall energy 14 expenditures, create jobs and reduce emissions. The final plan must build on the draft's 15 16 mention of standards as a priority by including 17 more specific action items and metrics to 18 ensure the state follows through on that 19 commitment. Specifically, the codes council 20 process for adopting 2012 IECC/ASHRAE 90.1-2010 21 for both residential and commercial buildings 22 has slipped repeatedly and should be a top 23 priority for the administration to complete. 24 We also urge full participation by the state in

25 the EIC model code setting process, including

attendance at key IECC meetings. Finally, the
 state should also be active in promoting
 stronger energy efficiency standards at the
 federal level as these will result in
 substantial additional energy savings.

6 Renewable energy. The final plan must 7 scale up renewable energy. As with energy efficiency, the draft plan includes a state 8 9 commitment through 2025 to a renewable energy portfolio. While this -- sorry. While this is 10 11 positive, the final plan should direct the PSC 12 to issue an order by the year end 2014 that 13 targets meeting half of the state's electricity 14 demand with renewable energy in 2025. Further, 15 many customers who pay into the RPS are unable 16 to site solar, wind or other renewable 17 technologies where they live or work due to 18 infrastructure constraints. To address this barrier, the final plan should include a 19 20 directive to pursue the regulatory and/or 21 legislative changes necessary to allow 22 customers to aggregate their demand and 23 subscribe to an off-sight renewable project 24 that would offset a portion of their demand 25 from the grid that is already being implemented 1 in states such as Colorado.

2 Franking. NRDC is pleased that the state energy plan appears not to contemplate new 3 high-volume hydraulic fracturing within New 4 5 York State. NRDC remains opposed to any new 6 fracking New York until the potential risks to 7 human health and the environment have been fully evaluated. Given that important new 8 9 science continues to be advanced, particularly 10 with respect to health impacts, we support an 11 on-going de facto moratorium on fracking n the 12 state.

13 In the meantime we are aware that the state's continued and projected increased 14 consumption of natural gas from other locations 15 16 results in serious impacts in those places. 17 Although NRDC and others continue to work to 18 ensure that the most protective safeguards are 19 put in place wherever fracking occurs, our top 20 priority must be to move beyond fossil fuels as 21 rapidly as possible. Consistent with other 22 recommendations made in this testimony, NRDC 23 therefore urges the state to take aggressive 24 measures to reduce our dependence on all fossil 25 fuels, including natural gas, and to ramp up

the use of energy efficiency and renewable
 energy as quickly as possible.

New York should pursue transportation 3 sector greenhouse gas reductions. In 2012 the 4 5 transportation sector accounted for 28 percent 6 of New York's primary energy use and has 7 persistently been the fastest growing sector year-over-year. New York should build on its 8 9 Charge New York initiative to continue 10 investing in electric vehicle infrastructure, 11 make the necessary regulatory changes at the 12 PSC to remove barriers and create incentives 13 and education programs to accelerate EV adoption. 14

The governor must also ensure New York plays a lead role in fulfilling the recently signed state zero emission MOU and explores mechanisms that can track the carbon intensity of the state's liquid fuels, which are on a path to get dirtier as tar sands-derived fuels potentially enter the state's market.

There should also be additional goals and implementation details about the proposed initiatives on increasing transportation system and location efficiency and coordinated

infrastructure investment through integrated 1 2 energy, transportation, land use and sustainability planning, all of which will 3 yield reduced emissions, reduced transportation 4 5 costs, greater economic growth and a higher 6 quality of life for New York's residents. 7 Thank you. 8 MR. RHODES: Thank you very much. 9 AUDIENCE MEMBER: My name is Kim Michaels. 10 MR. RHODES: Hold on. So the following 11 person will be Tyler Cook. 12 AUDIENCE MEMBER: I'm sorry. 13 MR. RHODES: I'm just naming the person 14 who follows you. 15 AUDIENCE MEMBER: I've heard a lot of 16 comments today and it seems that people are 17 seeing this as either natural gas or clean 18 green renewable energy. My issue with this whole deal is that they both come out of the 19 20 same hole and they both involve nuclear energy 21 and radiation as found in our shales. Our 22 shale contains natural gas, shale oil, high 23 conservation of rare earth which is used for 24 clean renewable energy, so-called clean renewable energy, of which residents suffered 25

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horrendous health and environmental

2 degradation. They have cancer villages, issues with skyrocketing birth defects. This has 3 been -- there's been a huge attempt on the part 4 5 of China in keeping this covered up. And one 6 particular story that I had heard about was a 7 journalist in China, and they were providing them with private email information, he ended 8 9 up getting nailed for it. But, you know, and he was, I think, I believe settled out of 10 11 court. 107 of these people ended up with ten 12 year jail sentences. It -- it's just one thing 13 I wanted to mention. But I'm asking all of 14 you, if you hold the United States up to the same standards as we've held other countries, 15 16 this would require that you put on hold not 17 only this energy plan but the entire budget 18 recent amendment and recent changes as far as 19 law that's put into effect. Because all of it, 20 not even just so much of it, all of it pertains 21 to mining issues. In mining -- in mining, for 22 the rare earth, they all, in addition to the 23 fact that they're totally interlinked, which 24 radioactive material which has -- and they have 25 to be separated from each other. They use

intense heat, extreme toxic gases. 1 In 2 addition, more recently, they have begun 3 creating organisms. Microorganisms are to be created to withstand intense extremes in heat, 4 5 temperature, radiation, toxic heavy metal, 6 toxic gasses. All of the things that we would 7 typically use to destroy harmful bacteria. The magnitude of this, I can't even describe. 8 9 Because if something like this got out into the 10 environment, and I fear it may already have, it 11 would be uncontrollable. You would sit here 12 and picture an ordinary invasive species of a 13 plant or animal that you can actually see and think of how far different it is to eradicate 14 15 something like that. And in this situation 16 you're trying -- you're trying with something 17 that is so small, you can't even see it. Some 18 of this is difficult to see if even with a 19 microscope. And those bacteria, it's actually 20 bacteria, yeast, mold, fungi, all of which have 21 the ability to reproduce repeatedly, to evolve 22 rapidly and also to transfer their genetics 23 into other microorganisms. They can destroy 24 existing microorganisms in our environment. 25 And they can also just overtake it. The human

body has more microbe cells, they have a major role in every form of life. Just to give you some idea of the issues that we're dealing with.

5 Now I will go with to the plan. There are 6 great men in our history who fear for 7 American's future, all of them due to radiation and nuclear power. Between them, the 8 9 additional grave concern due to cover-ups 10 threaten alliance between government business 11 and (inaudible.) Those men are Albert Einstein who is the greatest genius of all time. Dr. 12 13 Carl J. Morgan, known as the father of nuclear 14 health physics, an admiral and the father of nuclear Navy, it is my concern that our 15 16 governor and president, with the help of 17 others, have effectively declared an unofficial 18 war on their own people. A war involving 19 economic, psychological and biological chemical 20 radioactive war and to slide into fascism. The 21 same thing is happening in other country to create a world government which would 22 23 effectively ensure fear. The same resources an 24 technology used to create the damage would also 25 be used to mitigate it by the same group of

businessmen with political clout. No, sir, 1 2 this needs to be opposed, the energy plan in its entirety and all recent changes, or at 3 least put on hold while my claims are 4 5 investigated. Such a request may seem 6 extraordinary, but upholding this request is 7 not only reasonable but imperative. If the 8 people in our state and our country, as well as 9 the people of other countries, are to be 10 protecting a group of treasonous, 11 internationals with political clout by danger 12 will more actually and comparison this group 13 (Inaudible) of unprecedented mining reliefs after use of high radioactive and toxic 14 material as found in the shales and mitigate 15 16 genetic microorganisms and be able to alter and 17 engineer a climate and geological event --18 MR. RHODES: Ma'am, I'm sorry, you have 19 gone over your time. If it's written comments, 20 you can --

AUDIENCE MEMBER: The other person before me spoke for quite a little longer, I believe. Well, I would like to say is that the people that the -- did that, the investigation, that the investigation include Govenour Cuomo,

President Obama, Robert F. Kennedy, Jr., and as 1 2 it appears the UN discharged, and his associates with an advantage point now known as 3 advantage point capitol partners, James C. 4 5 Kennedy, Al Gore and Major General Charles R. 6 Henry who seems to be the one benefiting the 7 most. It's involvement with the national 8 venture business corporation deserves some 9 attention. I think it's unfortunate that you 10 don't want to hear the rest. I mean if you 11 truly want to make a good --12 MR. RHODES: Ma'am, we have other 13 speakers. 14 AUDIENCE MEMBER: Fair enough. Fair 15 enough. 16 MR. RHODES: Please come back at the end 17 of the que. Thank you. Tam. 18 Tamra Cook followed by Darren Suarez. 19 AUDIENCE MEMBER: My name is Tamra Cook 20 and I'm from the Akewsane Mohawk Nation and I 21 would like to commend everyone before me that 22 has spoke. And a lot of what they said I 23 really hope that when this is done and over you 24 actually take the time and not only effect your whole -- a whole system in the ways that you 25

actually have to think about this, but about it 1 2 also grows to your heart. Right now, as one of 3 the speakers said, they would give their life. That is the one thing that we Akewsane people 4 5 are still here for. We're here to protect this 6 earth. We still exist to protect our Mother. 7 That's our responsibilities. We were not made extinct. You could not get rid of us. 8 And 9 we're not going anywhere. We'll stand on the 10 line, we'll stand on the frontlines and we'll 11 put a call out to our warriors, and they're all 12 across the whole United States, they're all 13 across the world. We have, I don't know, more 14 that actually stand in the frontlines. Not 15 just here, Canada, China, all over the place. 16 Right now we have our brothers and sisters up 17 in New Brunswick that are there constantly, 18 constantly on a daily basis to stop any of 19 this, any of the destruction that you guys are 20 trying to do, that the outsiders are trying to 21 do, that those oil companies are trying to come 22 in and extract these natural resources that are 23 supposed to make our living life so much 24 easier. We're supposed to respect her, we're 25 not supposed to destroy her. And right now,

and I have to say that unfortunately he 1 2 couldn't have been here, and it would have been great for him to actually be here, was 3 Mr. Dennis Bank. And I tell you, after 4 5 watching him and listening to him, he said that 6 sooner or later you're going to actually have 7 that reason to stand up and to say what you need to say. This is that reason. This is 8 9 that time to actually stand up and to tell you 10 that we're not going to go away. So I would 11 hope that if that decision lies when you --12 that you're the one who can decide whether or 13 not we've this allowed here in New York State, 14 that I would ask that you please let New York be the leaders that we're supposed to be and 15 16 show everyone else that we're not afraid to say 17 no to ban fracking, something that you're not afraid to say no to. That protects your 18 19 future, your grandchildren's future, protects 20 your water, your land and your air. That that 21 is something that you hold more valuable than a 22 dollar. One thing is that before, just I don't 23 know if you guys understand, that the whole two 24 (Inaudible) but what it does for our people is 25 it represents a thousand years of democratic

principals that we shared with our brothers and 1 2 sisters. Even the new ones, including Thomas Jefferson, Ben Franklin who openly acknowledge 3 in speeches and writings our contributions form 4 5 the basis of the constitution. We shared our 6 belief that our leaders should represent and 7 serve the people. We shared what we call the great laws with the natural laws of human 8 9 dignity that preserved an underlying all other 10 laws. And it is important to the pursuit of 11 all happiness that we, the people, now means 12 and continues to mean we all of us who are 13 Americans. So I ask that you listen to at 14 least the people on this. This is why you sit 15 where you sit. This is why our government sits 16 where our government sits, because we the 17 people chose you. Now we're asking you to back 18 us in what we want. Because, like I said, 19 we're not going to go away. We'll stand on the 20 front lines and those calls will be put out. MR. RHODES: Thank you very much. Let's 21 22 take a quick recess. 23 (A brief recess was taken.)

24 MR. RHODES: Darren Suarez to be followed25 by Dorothy Pomponio.

AUDIENCE MEMBER: Well, thank you to our 1 2 stenographer for a small break. Good I'm Darren Suarez, director of 3 afternoon. government affairs for the Business Council of 4 5 the State of New York. The Business Council is 6 the leading business organization in New York 7 State representing the interests of small and larger firms throughout the state employing our 8 9 1.4 million people. 10 On behalf of the members of the Business 11 Council of New York State, I would like to 12 thank the members of the New York State Energy 13 Planning Board and their respective agencies, 14 commissions and authorities for the development of the 2014 Draft State Energy Plan. 15 16 There are numerous items that are 17 contained in the 2014 Draft State Energy Plan 18 that the members of the Business Council 19 support from overachieving goals like improving 20 energy affordability to initiatives like a 21 commitment to support infrastructure 22 improvements to encourage increased use of 23 alternative forms of transit. Additionally, 24 the Business Council strongly supports the 25 draft plan acknowledgement of the power of

private sector to provide and improve our 1 2 energy system's ability to meet the goals of the people of the State of New York. 3 The Business Council's written comments on 4 5 the draft plan will provide a more 6 comprehensive review and constructive comments 7 on the Draft Energy Plan. Our comments today will focus on a few items of concern. 8 9 Specifically our comments today will address 10 the benefits of the wholesale markets, 11 transmission upgrades and climate change 12 benefits of natural gas. 13 In reviewing the state's energy needs to 14 ensure that it is important to recognize that what has worked, and then take steps to 15 16 preserve it and duplicate its successes where 17 applicable. The final state energy plan should

18 recognize that New York now has a dynamic and 19 competitive energy market where capital costs 20 and associated risks for conventional projects 21 are borne directly by private developers rather 22 than through public subsidies.

It is important to note the market is explicitly structured to provide price signals for new conventional generation construction,

repowering and continued operations where such
 actions are cost-effective and appropriate tod
 maintaining reliability.

In large part due to New York's energy
market design, New YOrk electric customers have
benefited from cleaner more reliable energy end
generation as well as historically lower
electricity costs.

9 Additionally, market based solutions have 10 met state-wide reliability. Location based 11 price signals provided by New York's wholesale 12 electricity markets have traditionally 13 encouraged investments in areas where there's 14 demand for electricity.

Like all markets, there are opportunities to review and provide minor adjustments to ensure efficient market outcomes that deliver reliable cost power to consumers. One area where the state can facilitate a more efficient wholesale market is improvement of pipelines and power lines.

22 New York's current energy infrastructure, 23 which includes 10,900 miles of high voltage 24 transmission lines, tens of thousands of 25 natural gas transmission lines and 500

generators, is the system that generates the 1 2 life blood of New York's economy. Without 3 heat, light and power, we cannot operate or maintain the businesses and institutions that 4 5 provide New Yorker's with goods, jobs and homes. And many communities directly benefit 6 7 from the continued presences of the economic benefits of power generations. New York's 8 9 existing energy transmission infrastructure 10 represents one of the most cost-effective means 11 to meet the demand of the 21st century. And 12 well-designed transmission upgrades will ensure 13 that future load and generation needs are addressed in New York. 14 The Business Council strongly supports 15 16 elements of the Draft Energy Plan that support 17 the expansion of the current energy 18 infrastructure. Upgrades and improved 19 transmission lines and pipelines provide 20 economic benefits for New York energy consumers through relief of the most congested elements 21 22 of the transmission system, integration and 23 expansion of additional renewable energy 24 resources on a non-discriminatory basis, along 25 with congestion relief. Additionally, new

electric transmission lines support existing 1 2 generation resources that are challenged by transmission congestion, thereby helping to 3 secure existing capacity to aid in system 4 5 reliability and support the existing vast fuel 6 diversity in New York, one of the most fuel 7 diverse states in the country which protects consumers from commodity price volatility as 8 recent cold weather has shown. 9

10 Our membership in various forms has 11 committed significant time and talent to 12 addressing the myriad of public policy issues 13 surrounding climate change. We are concerned 14 the draft state energy plan does not focus 15 enough on the development of upon climate 16 policies with co-benefits, and instead focuses 17 upon one-sector command and control mechanism 18 which has not been proven effective at 19 addressing CO2. Additionally, we believe that 20 it is unwise to focus climate policy merely on 21 carbon dioxide to the exclusion of other human influences on the climate system. In fact, 22 23 early action on a wider range of human 24 influences on climate could be timelier and 25 less costly.

The Business Council supports the adoption 1 2 of climate policies with co-benefits. We support the adoption of climate policies that 3 provide near term, concrete, politically 4 attractive benefits that additionally address 5 6 climate change. Thus, the primary rationale 7 for the policy goals is to improve the quality of human life, enjoyment and health, economic 8 advancement. Additionally, each of these 9 10 policy goals would have co-benefits to reduce 11 the scale of humans on the climate system. 12 This draft energy map should be amended to 13 include a specific initiative dedicated to the 14 advancement and adoption of more LNG usage in 15 New York State. It is time that fear and 16 emotions be put aside and for the state to 17 embrace facts and hard science. 18 LNG is beginning to be used in rural areas 19 as an alternative to propane and oil heat.

20 Additionally, LNG can meet the demands of New21 York distributed energy needs.

The Business Council of the State of New York believes that the state plan should commit to address our energy needs through advance mean of sustainable improvements.

And, finally, we support and believe that 1 2 the state energy plan should be specifically committed to the promotion of economic 3 liability of our nuclear power generation and 4 5 low-carbon nuclear energy that provides 6 numerous attributes including round-the-clock 7 production of large amounts of electricity to help stabilize the electric grid, clean air 8 compliance, forward electricity price 9 10 stability, fuel and technology diversity and 11 high-paying jobs at facilities that can 12 withstand extreme natural and man-made events. 13 Thank you. MR. RHODES: Thank you very much. Dorothy 14 15 Pomponio followed by Anthony Guarneri. Okay, 16 Anthony Guarneri to be followed by William

17 Huston.

AUDIENCE MEMBER: Hello. I'm Anthony Guarneri with ASI Energy. I'm here today to speak about the technology combined Heating and Power and Mirco Grids and their installation that we're working with, specifically with the multi-owner situation. I'm here from Northeast Green Heat and Power Initiative.

25 This overview of what I would like to

present is of combined heating and power in 1 2 microgrid. I would like to speak about the Program Energize Ithaca Mirco Grid. I would 3 like to address Initiative 3 regarding 4 5 implementing building codes and standards that 6 will support energy efficiency and clean 7 energy. And then a request for policy development for microgrid and the 8 interconnection thereof to make it easier with 9 10 codes and interconnection a requirement. Some 11 specific micro interconnections is simply we 12 want to help get clean, and that is what I'm 13 going to end this presentation on. 14 So my business partner Herbert Dwyer and I 15 own ASI Energy and ASI Renovations. An Ithaca 16 based CHP developer. We are a designer build 17 finance operate firm working with energy 18 efficient technology suited for the individual 19 building needs of a building. So we work in a 20 public situation. We don't represent 21 technology. 22

22 Combined heating and power is a technology 23 that burns a single fuel to produce electricity 24 and hot water. So basically you scale down a 25 power plant to fit in a boiler room. Natural

gas is burned to boil water and spin generators 1 2 to produce electricity. Instead other exhaust gas is being vented into the atmosphere. It is 3 captured and used to heat water and the water 4 5 is distributed to heat the local building. You 6 can think of this technology as a big boiler 7 that captures the exhaust gas to spin an alternator to produce electricity locally. We 8 9 can also cool with this hot water by running it 10 through an absorption chiller which, in a 11 nutshell, produces chilled water for hydraulic 12 cooling so your cooling is not using 13 electricity, which is more efficient. There's 14 actually a CHP being used in this building on 15 the first floor. I happen to come across that. 16 I would like to talk about microgrids. A microgrid is a small scale version of the 17 18 centralized electric system. A microgrid is electricity and hot hater, in this case 19 20 generation energy and load consumption that 21 would normally operate connected to the 22 traditional centralized map, how far it could 23 stand upon itself. This single point of common 24 coupling with the microgrid can be

25 disconnection in a microgrid can function

alone. So when Superstorm Sandy hit, and 1 2 everyone lost power and buildings were black, when the buildings did actually have power, the 3 majority of them were combined heating and 4 5 power. So this is what I'm speaking on. CHP 6 power and microgrid make multi-owner systems 7 easier to install from a building component interconnection standpoint. 8

I am here speaking on behalf the Northeast 9 10 clean Heat and Power Initiative. The 11 organization functions across seven 12 northeastern states and New England and New 13 York as a volunteer association for the past We are a 501C6 non-profit. We are a 14 decade. 15 business league which shares a common interest 16 in developing favorable situations for the 17 technology as a whole to be implemented.

18 Top page of Page 3. So the board wanted 19 to invite panel members and general audience to 20 an annual meeting on May 13 at the Empire State 21 Plaza. Google search it and it will probably 22 pull up the rest of the details. NECHPI is 23 interested in having a table discussion where 24 we can speak on behalf of policy and lend different opinions. 25

After reviewing the New York State Energy 1 2 Draft Plan, which is an excellent plan and we are very excited about the many strategies 3 outlined in the Draft Energy Plan that 4 5 harmonize well with CHP. We support this plan 6 and look forward to its implementation. We 7 also look to NYSERDA and Govenour Cuomo for the incentives and support of CHP technology that 8 9 we have recently achieved in economic 10 incentives of over 100 million dollars in the 11 next three years. 12 Initiative 3; building codes 13 interconnection. We want to connect 14 multi-owners in microgrid by the Burrstone Project. They had some problems with this, so 15 16 some of the policies we're interested in 17 working with is the definition of at or near 18 which was brought up in Burrstone. Making the 19 possibility of all our power through the 20 microgrid to consumers through purchase power 21 agreement for other mechanisms using 22 essentially transmission lines to purchase 23 power, our own energy. We would like the 24 process for interconnection multi-building --25 multiple building owners to be alerted to this

sort of process. And that's it. The 1 2 supplemental information is in the rest of the 3 packet. Thank you. MR. RHODES: Thank you very much. 4 5 So now I have three requests for second 6 speaker opportunities. William Huston, Kim 7 Michaels and Michelle -- Carol Chock. AUDIENCE MEMBER: Can we make it four? 8 MR. RHODES: Sure. Keith Schue. It's 9 10 just us now so we get to decide shall we stick 11 with the five minute rule? 12 AUDIENCE MEMBER: I don't think I'm going to need five minutes. 13 MR. RHODES: Then we'll stick with the 14 15 five minute rule, and if we need a little past 16 that, we'll go to that. 17 AUDIENCE MEMBER: Thank you. William Huston, Broome County. One thing I would like 18 19 to see in the Draft Energy Plan, and I need to 20 do some actual more study of, which is why 21 we're asking for more time, I think there's a 22 lot people in the same situation that I am. Ι 23 didn't see much having to do with energy 24 conservation. I think that's an important, 25 critical part of this. I would like to see

more on that. Out of the 15 initiatives, there 1 2 really were a few in there that sounded good to me in terms of support for green energy, 3 renewable energy. One troubling thing is the 4 first one of the very first 11 goals of the 5 6 first initiative is fostering economic growth. 7 To quote Edward Abbey, "growth is a paradime of cancer cell." This is an obsolete and a failed 8 9 world view and it doesn't match the realities 10 of our world, which has to do with, of course, 11 climate change. And the one thing that I wanted to speak about the first time I was up, 12 13 and I'm grateful that you're allowing me a 14 second time, is peak oil. So climate change 15 really is the biggest problem, because on the 16 horizon is mass extinction. So that's the most 17 serious problem is climate change. However, 18 peak oil, and very few people are talking about 19 this but I'm became sure you're all familiar 20 with peak oil, basically is used as a single 21 gas oil. Follows a parabolic curve in terms of 22 its production. And this guy called HC Hubbard 23 became an authority on aggregate oil fields on 24 planet earth that also is an approximate -it's a parabolic function. So the idea is that 25

we're going to burn through half of the 1 2 recoverable reserves and then no matter what we do after that point we're going to have a 3 diminishing reserve. And I think that most 4 5 people who have studied this problem, 6 scientists, they weren't in disagreement about 7 whether peak oil is true, but some disagreement with gas peak or shale gas peak or peak of 8 9 various findings. The problem with being on 10 the downside of the peak oil curve is that it's 11 extremely serious, especially when our demands 12 for fossil fuels, which is embodied in this 13 plan, that's a fledgling point. I explain it as the second derivative over the first 14 15 derivative. A positive slope to a negative 16 lope. Yet the demand is rising. What we 17 expect to see from this is much higher prices 18 for those fuels. And the other thing it has to 19 do with energy return on energy investment. So 20 the ultimate barrier is one-to-one. That means 21 in the old days they would spend one unit of 22 energy and poke a hole down and you would get a 23 hundred or two hundred units of energy back. 24 Now typically in our fuel mix our EROEI is 25 somewhere around ten to one -- I'm sorry, one

to ten or one to five. The ultimate barrier is 1 2 one-to-one. If you spend a unit of energy to get a unit of energy, there's no reason to even 3 go for it. And that's called the energy cliff. 4 5 You don't want to reach the energy cliff. We need here -- what we need here, that is recall 6 7 the point for you all, is that as we approach EROEI one-to-one, the practical limit for 8 9 technical reason is higher than that. We're 10 getting close to the technical climate energy 11 limit of energy production. There should -- we 12 leave it up to the free market. We're still 13 going to -- we're going to take this, we're 14 going to take this fossil fuel party to the last day if we're going to follow what the 15 16 market is doing to the bank and the energy 17 companies. We're going to take this to the 18 last day. And when it runs out, there's going 19 to be a human crash. What we need is a -- we 20 need the regulators, that's you all, we need 21 you to form policy that shifts us into the 22 right direction before we hit that critical 23 point or else we're going to meet with 24 disaster. Thank you.

25 MR. RHODES: Thank you very much. I don't

see her, but for the record Kim Michaels?
 Carol Chock to be followed by Keith Schue to be
 followed by Lenora Monkemeyer.

AUDIENCE MEMBER: Thank you for this 4 opportunity to speak again. I'm Carol Chock 5 6 from Tompkins County Legislature. I will make 7 a personal observation that the -- I think one of the reasons you're seeing such an eminent 8 9 response from people to the nature of this plan 10 is -- and to some of the energy discussions in 11 New York State -- can be traced to the kind of 12 observations that were made in Moreland 13 Commission. Not the one that is -- has been in 14 the news on ethics, but the storm report. And 15 if you look there, I think it's on Pages 31 to 16 37, it might be in the 40's, about process, 17 communication regarding energy decisions and 18 access. That ultimate effect the rate payer, who are the consumers of that, which we're 19 20 tying to do here, just addressing the process 21 is -- needs to be part of any planning. So 22 that's why, it's a personal observation from 23 work that I have done as president of the rate 24 payers an community interventors group on 25 public service commission cases. I did want to

take time to go back to some of the stuff I 1 2 didn't have a chance to talk about from the Tompkins County Resolution that was passed two 3 nights ago, which you all now have copies of. 4 5 I talk about our experiences with weather 6 events. I would also like to talk about the 7 ways in which we have already experienced and will, as communities across the state will 8 9 experience, economic and social impacts from 10 the changes in uncertainties in the energy 11 supply mix and price structure for existing and new sources of energy unless there's advance 12 13 planning. And one of the things that was 14 referred to in the New York State Energy 15 Highway Blueprints that didn't come out in the 16 energy plans, and I think that's really 17 important, is that if you look at the 18 blueprints, many of other programs talked about 19 they're now having those blueprints on the 20 website that take you to an actual program. 21 The ones that don't still is a common 22 transition program. It was recommended to be 23 established as part of energy blueprints and 24 any plans made to establish bold solutions to 25 new challenges -- this is now from the

1 resolution -- must meet these challenges with 2 new solutions by making sure that new communities and incentives are available in the 3 community that have built their employment and 4 5 tax base on the older technologies. Renewable 6 technology and incentives should be offered to 7 companies to build in those communities like ours formally housing fossil fuels or nuclear 8 9 fueled plants. As we go through, and this is back to me, you know, as we transition to new 10 11 technologies in any field, when we close the 12 clothing mills, the towns that didn't develop a 13 plan about how to survive as new technology 14 moved in to replace those were in trouble. And 15 so unless a plan for New York State addresses 16 that, we'll be in trouble. And we'll never get 17 to that if we don't plan for the communities 18 that will be hurt along the way and then that 19 should be helped to implement green technology 20 and profit from those. Other thing that we 21 referred to in our resolution that we would like to see revised in the final plan, tougher 22 23 building standards and energy efficiency 24 methods require new buildings to achieve net 25 zero use by specific target dates. The

1 potential energy generating capacity using 2 available substance as renewable energy were 3 referred to in several plans, now most noted the Jacobson plan from standards. 4 There were 5 13 authors. Jacobson, two of them were Bob 6 Howard and Tony (inaudible) was published and 7 called energy policy issue 57 in 2013. And the numbers for New York State were updated and can 8 9 easily be found and looked at a site called the 10 solution project. Solutionproject.org. They 11 have created a plan for every state. So please 12 read that. Just a few more. Greater levels of 13 detail about reduction in demand that could be 14 achieved through demand requirements. There's 15 no reason why, in our case, the new steel plant 16 up in Auburn shouldn't be scaling back on the 17 busiest times of the year. One more: Defined 18 targets for clean vehicular transportation.

And just in conclusion, the draft plan emphasizes, and we agree with, market based solutions to our energy transition. We believe that the approach that includes the implementation of regulations and tax policies aimed at penalizing polluting energy sources and encouraging efficiency in renewable energy

will be necessary ultimately to dramatically
change the market in favor of renewable energy
and efficiency, especially in time to met the
target date set. So we encourage you that we
think it's doable. And we encourage you to
address that in the final plan. And thank you,
again, for this opportunity.

8 MR. RHODES: Thank you very much. Keith 9 Schue to be followed by Lenora Monkemeyer and 10 then Lindzee Powell.

11 AUDIENCE MEMBER: Thank you again for this second opportunity to talk. I appreciate that. 12 13 I want to talk a little bit about how you -- a 14 little more technical standpoint, how you 15 calculate the impact, the climate driving 16 impact, of methane and carbon dioxide. Because 17 this has been talked about a lot today but I 18 want to discuss it a little more. One thing 19 that I see in this plan is that a forecast 20 for -- if you do consider carbon dioxide 21 equivalency, there's a forecast here that says 22 by 2030 that you can get to 9 percent below 23 1990 levels. And on Page 14 of Volume 2, that 24 is, it says New York forecasts total greenhouse 25 gas emissions are anticipated to decrease by

2.4 from 2011 to reach about 2000 MMT carbon 1 2 dioxide equivalent by 2030, or nine percent below 1990 levels. So your forecast by the 3 year 2030 that you're going to be just 4 5 nine percent below, and that's looking at carbon dioxide equivalency. The reason we have 6 7 a big problem with looking at just methane is because, if I reconcile this with the other 8 9 claim that's made, that you think you can get 10 to -- you think you can get to 50 percent 11 reduction of carbon dioxide only by 2030. That 12 really tells you this nine percent versus that 13 50 percent how much you're not taking into 14 account that's related to methane. So getting 15 to 50 percent reduction by 2030 with carbon 16 dioxide obviously isn't getting you anywhere 17 close to what you need to be if you're -- that 18 only means nine percent of carbon dioxide 19 equivalency in the same time frame. Then 20 obviously you have 71 percent left to go in the 21 next 20 years after that. So there seems to be 22 a real problem with that. So I would also want 23 to mention that carbon dioxide equivalency 24 itself, there's some defects in looking at that 25 only. You mean the EPA acknowledges

multi-factors which is about 21 -- basically 1 2 that methane has a climate driving effect that is 21 times worse than carbon dioxide. We know 3 from the intergovernmental panel climate 4 5 planning that number really is more like over a 6 hundred years time frame. But what really 7 matters is what happens over that 20 year time frame. So that 20 year time frame where we 8 9 know that effect is 86 times worse. That makes 10 all the difference. That has been said a few 11 times here today. We don't have a hundred 12 years to deal with this problem. 20 years time 13 frame is absolutely critical. We have good 14 science that seas, that oceans are approaching this temperature threshold by -- we'll reach 15 16 two degrees Celsius increase. And when that 17 happens, we're in a state where the climate 18 can't be recovered thousands of years before we 19 get back, so we have to very quickly bring our 20 emissions up. The next 20 years is absolutely 21 critical. So I would suggest that when you look at CO2, you need to look at something 22 23 else. May be call it CO2 plus something that 24 actually looks at what that impact is over the 25 20 year time frame. Thank you.

MR. RHODES: Thank you very much. Lenora
 Myers and then Lindzee Powell. And I believe
 another request just came in.

AUDIENCE MEMBER: Hello. My name is 4 5 Lenora Myers. I'm an alumni of Syracuse 6 University. The New York Energy Plan should 7 include many more renewables because they're getting better, more efficient with design. A 8 9 new design is a three dimensional one that is 10 two times more than -- 20 times more powerful 11 out than flat solar panels with the same base area. It goes like this: Tell me if you have 12 13 seen the new solar panels? It looks this 14 (Indicating.) How many have seen that? It has 15 the shape of an accordion design. Has anybody 16 seen that before?

17 MR. RHODES: Yes.

18 AUDIENCE MEMBER: Great. It's an 19 accordion shape that rises vertically on the 20 roof. The design picks up the sunlight early 21 in the morning at sunrise and later in the 22 afternoon at sunset and in winter, something 23 that flat panels cannot do. MIT tested these 24 panels on the roof with great success. From 25 MIT news magazine 3-D solar. With innovation

1 such as these, one can see a grand opening into 2 solar along, and it is an exciting time. I 3 hope New York State Energy Plan studies this plan and other innovations and includes them in 4 5 its energy plan. The New York Energy Plan 6 should also assist DIY's, do-it-yourselfers, 7 who wish to assemble their own solar or wind energy projects. Online could be a free 8 9 website to assist homeowners to make solar 10 panels, et cetera, for their home or duplex. 11 The directions should be written simply for the 12 non-scientists. Another example for heating 13 innovation is a building we are in now. The --14 they use wood pellets from Willows. It not 15 only heats this building, but it heats adjacent 16 buildings. Nuclear should be phased out due to 17 the dangers of radioactivity. Fukushima is an 18 example. And we have a similar plant in 19 Oswego, New York of a similar design that could 20 be potentially very dangerous. Fracking 21 liquidated natural gas and storage tanks should 22 be banned in New York. According to 23 scientists, radioactivity from base water is 24 267 times the allowable rate. It can cause 25 cancer and Leukemia. For your future plans,

let's invite experts from Europe to give
 lectures who can help us formulate our
 renewable energy plan and transportation plan.
 Let's have a great time and a great century in
 the 21st century in renewables and try to stop
 global warming. Thank you.
 MR. RHODES: Thank you very much.

8 We have Lindzee Powell followed by Julia9 Wright.

10 AUDIENCE MEMBER: And thank you for taking 11 the time to hear me speak today. My name is 12 Lindzee Powell and I'm a New York State 13 resident as well as a student at Syracuse 14 University. I also worked on a hydrofracking campaign organization on campus. I'm an 15 16 aspiring geologist. I want to see how earth 17 works. I want to learn what the earth is made 18 I want to be educated as to be a up of. 19 leader. And I'm taking a stand for certain New 20 York State residents to be a voice for those 21 who don't know how to be or that they can be. 22 You all have been appointed to act in New 23 York's best interest. So why is fracking so 24 controversial? Why does a dollar mean more 25 than future generations than my generation, the

generation of my nieces and my nephews? Say no 1 2 to air pollution. It's dangerous to New York State that has seen detrimental consequences 3 all over the US, and just south of us in 4 5 Pennsylvania. We do not have a water treatment 6 plan to treat hydrofracking. I don't know if 7 you all have families, but personally I would do anything for my family. As a one child of 8 9 14, I was born and raised to fight for what I 10 believe in and I will wholeheartedly do so for 11 my family. I have family who live in the 12 southern tier who will be directly effected if 13 hydrofracking is brought to New York State. 14 Maybe my cousins will drink toxic tap water. Ι 15 stand here before you today to take a moment and think about it. Stand for what you believe 16 17 Hydrofracking pumps 800 known toxins into in. 18 ground water and hundreds more of chemicals 19 that are unknown. This is not just affecting 20 one spot of New York State, but every single 21 inhabitant of this state either directly, 22 indirectly. We need to ensure a clean 23 environment. That's why I'm here today. The 24 State Energy Plan is supposed to shape our 25 future, so why are we willing to bring

hydrofracking here for a few extra dollars? 1 2 The impact of fracking on water and air quality is completely ignored. This is something that 3 should be one hundred percent denounced in the 4 5 plan. We rely heavily on natural gas, and 6 hydrofracking will only increase our reliance. 7 The state energy plan is supposed to protect 8 New York's environment and to shape the future 9 of the environment. What will happen in the 10 next 10, 20, 30 years if fracking is allowed? 11 Detriment, consequences and an unhealthy 12 environment that's searching and driving for 13 natural gas. I'm here today to please let me 14 learn, let me become the geologist that I'm aspiring to be. Thank you. 15 16 Thank you. Julia Wright. MR. RHODES:

17 AUDIENCE MEMBER: I'm Julia Wright and I 18 have been in Syracuse now for four years living 19 and working in Syracuse. Before I get started, 20 I would like to thank you for the opportunity 21 to speak today. I would also like to thank the 22 individuals that spoke before me and those that 23 will speak after me. New York State's Energy 24 Plan has focus and goals to achieve a clean 25 environment in New York. The plan envisions

for an increase in natural gas use in New York 1 2 over the next 20 years. A goal impossible to 3 achieve. Relying on natural gas, especially from fracking, within New York, especially from 4 5 fracking -- I lost my spot. Relying on natural 6 gas, especially from fracking in New York or 7 its borders undermines plan's achievement for natural gas production can be done safely and 8 9 will bring forth a direct environment is 10 absurd. All we have to do to prove this is 11 look directly south of New York's borders to 12 Pennsylvania. We've seen fracking down there 13 and we've yet to see it be done safely. And, 14 in fact, time and time again there have been 15 again many consequences that are directly 16 related to fracking. Fracking has resulted in 17 diminished air quality, decreased property 18 value. And the problem that most concerns is 19 toxic tap water. Those impacts that I've just 20 stated are completely ignored with the current 21 draft plan. The state must look at all greenhouse gas emissions, not just carbon 22 23 dioxide if we're serious about addressing a 24 climate change. Most anything from fracking 25 gas undermines any benefits of reducing carbon

emissions from other fossil fuels to natural 1 2 gas. Furthermore, the state did not meet its goal of 80 by '20 under this plan. Depleting 3 that gas industry as part of the EPA and New 4 5 York State government believe within the 6 current draft fracking significantly means 7 emissions during every step of the process. Ι could stand up here for hours and tell you what 8 9 I believe is in addition within the draft of 10 the state Energy Plan because I'm sure there's 11 plenty more. But I'm not going to. 12 Fortunately, my allies have been here today, 13 have spoken before me and have made an 14 impressive job outlining the different issues within the draft. What I will tell you is that 15 16 I've built a community of family in Syracuse 17 for the past six years. I consider myself a 18 New Yorker and that's why I've been at the 19 front of the fight to ban fracking here. I 20 will fight for the welfare of my community, 21 family and friends as well as the well-being of 22 many generations of New Yorkers to come. In 23 your vision of the state energy plan, I urge 24 you to turn away from fossil fuels like natural 25 gas and turn to renewable energy resources like

1 wind and solar. I urge you to stop listening 2 to special interest groups and instead listen to the public's interest as well as your 3 constituents that have vowed to represent. 4 5 Thank you very much. 6 MR. RHODES: Thank you very much. 7 So what we'll do now is take a break and see if we've more speakers showing up. We will 8 be here until 7:00. So how about 4:30 we'll 9 10 reconvene and see if we have more. 11 (A brief recess was taken.) 12 MR. RHODES: We'll start with Howie 13 Hawkins followed by Peter Swords. 14 AUDIENCE MEMBER: Good afternoon. My name 15 is Howie Hawkins. I live here in Syracuse. Ι 16 was the green party candidate for New York 17 State governor in 2010. I'm seeking the green 18 party nomination again this year. I have six 19 point, and I'm just going to briefly mention 20 them. I have written up the testimony, I can 21 leave with you. 22 The first point is, for me most important,

23 the goal attempt of carbon envision reduction 24 in the draft plan is the 80 percent below 1990 25 levels. The plan affirms Govenour Paterson's

executive order of 24 that was adopted in 2009. 1 2 People like William (inaudible) and Kevin Anderson and his colleagues said that we need 3 to reduce industrial areas like New York by 4 5 six percent between -- between six percent per 6 year in ten years. That's between 10 and 17 7 If we're going to avoid catastrophic years. 8 climate change, we need to stay below the two 9 degree Celsius rise in temperature, which is 10 seen as the tipping. We go over the tipping 11 point and climate change is accelerated beyond 12 reversible. Fortunately we have seen a recent 13 study by Mark Jacobson who said in New York we 14 need a hundred percent carbon-free energy in 17 years by 2030. I think that ought to be the 15 16 goal of the energy plan, that's where you 17 should start. I should mention that the 18 prediction in the Jacobson study for the 19 economic impact is enormous. 600 billion 20 dollars invested, four-and-a-half million 21 construction jobs, 58,000 permanent jobs, 22 payroll of 18-and-a-half billion per year on a 23 construction phase and 5 billion per year 24 during the maintenance operation phase after 25 its built. So that is the most important

point, if I say. I hope that stays with you.
The plan is having a lot of forecasts but it
seems to be more adoption to these forecasts
than a progressive plan specifically targeting
a timeline. That's my second point.

6 My third point is, you probably heard this 7 all day, natural gas is not clean. It may be even worse than oil and gas according to the 8 9 reserve by Robert Howarth and Anthony Infraffea 10 at Cornell. So there are alternatives. Ground 11 source heat pumps, solar thermal panels and 12 sustainable biofuels where biochar is put back 13 in the soil and sequestered.

14 My fourth point is nuclear power. Plans 15 seems to increase in the nuclear power in 2030 16 when two plants are scheduled to be retired. 17 Before then we have a political leadership of 18 the state pushing shutdown of Indian Points 1 19 and 2. Financial media reports that 20 Fitzpatrick and Ginna should shutdown for 21 economic reasons. So this is not realistic and 22 I would argue that the plan should plan for the 23 rapid phase out nuclear power and its 24 replacement should be with a clean renewable. 25 Fifth point. Electrified transportation.

Transportation needs to be much more developed. 1 2 The Jacobson study goes on how an electrified transportation would look. It would include 3 the vehicle trucks and cars as well electrified 4 5 ails for interurban mass transit, interurban 6 travel. We used those interurban travel 7 between 1900 and 1940 that served upstate cities and towns very well. And then, of 8 9 course, highspeed rail, which is being 10 discussed.

11 As the last point, energy efficiency, the 12 cheapest and fastest source of clean energy. 13 This needs to be much more flushed out with 14 specific targets and timelines. I did see one 15 target of 20 percent demand reduction by 2025, 16 which is close to that or the Jacobson study 17 which implies 37 percent reduction by 2030. 18 But it needs to be flushed out. And I 19 understand that -- or there's been a study of 20 renewable energy initiative that's not been 21 made public. I would love to see the study, so 22 will you release that? Thank you. 23 MR. RHODES: Thank you. Peter Swords. 24 Thank you for coming back, sir.

25 AUDIENCE MEMBER: Thank you for keeping

the hearing open today so that people like me 1 2 who work can still participate. I've lived in Syracuse for 40 years, raised a family here, 3 own a home. I still own a home and have worked 4 5 as an automechanic and social worker, so I have 6 some practical experience in how energy can be 7 used to save and can become something that we have some input into the decision about. 8 9 Thirty years ago in my home we still had solar 10 energy tax credit, we built a solar greenhouse. 11 It's still operating and helping to heat my 12 house today. And I'm very grateful to NYSERDA 13 and to all the renewable energy policies that had led to that short window of time in 14 1984/1985 when we were able to build a 15 16 greenhouse. I would love to see those kinds of 17 supports for renewable energy come back. If 18 you think of how many families would be able to 19 use that, even in Syracuse, even those -- we 20 have a month or so of very dark skies, very 21 cold weather, it still works. There's enough 22 sunny days that this greenhouse is really 23 working for me. So I would recommend that if 24 we have more support for not only passive solar 25 and solar heating, but also efficiency, people

insulating houses, getting rids of waste. I 1 2 think we could save a lot of energy. Of course 3 as people have said the cheapest energy source is efficiency. Speaking of efficiency. At the 4 5 same time I've been living here we built 6 additional nuclear plants up north. We 7 discovered the cost overrun safety probably with nuclear waste. We also discovered that 8 9 nuclear is not carbon free. Nuclear plants use 10 the uranium which is mined using huge 11 bulldozers and alike that burn fossil fuels and 12 it's enriched using all kinds of very, very 13 high energy processes. I was one of nine 14 people in Oswego several years ago when the NRC 15 came to town to have a hearing about possibly 16 building a fourth nuclear plant, I was one of 17 nine people t that hearing of 300 people, the 18 rest of the people were obviously pro-nuclear, 19 I was there when Steve Pend, who is a physicist 20 and professor spoke up and asked the panel if 21 they have ever done a study to compare cost of 22 energy produced by a nuclear power with energy 23 saved by efficiencies. You know what they 24 said, the NRC guys said we don't study 25 efficiencies, we don't know. That was really

amazing to me that it a government energy 1 2 agency would not have that kind of information. I think that's something that we should make 3 sure we have so that we can determine whether 4 5 we can actually practically plan the kind of 6 thing that this energy plan is outlining, which 7 I think are very good goals. Because climate 8 change is not only about the sources and the 9 demands and how we tailor the sources and 10 supply to what we actually use it for. It's 11 very silly to use electricity for heat, 12 important to use solar. It's very silly to 13 use -- to try to use nuclear power to boil 14 water to produce energy. And you know what we 15 are stuck with is a lot of cost. New York 16 State can be a leader in smart energy use. Ι 17 would like to see us use the skills and 18 resources of ESF, the efficiencies, the studies 19 that have already been done at the Center of 20 excellence downtown. I would like to see that 21 information get added to the New York State 22 Energy Plan so we have something that will 23 makes sense and can benefit people like me who 24 can -- want to continue to live here in New

25 York State. Thank you very much.

1 MR. RHODES: Thank you very much, sir. So 2 now we're going to pause and see if we get more 3 speakers and comments. We will reconvene at 5:45. And, of course, if there's a need, 4 5 because of time of day, we'll reconvene sooner. 6 But Mr. Swords and Mr. Hawkins, I don't know if 7 you're going to stay for my final remarks, but 8 thank you very much for coming. It really is 9 an important part of the process. I know you 10 made a great effort, twice in one case. 11 AUDIENCE MEMBER: We appreciate your work. 12 And hope to see it on the website if we can't 13 hear the final stuff today. 14 MR. RHODES: Thank you. 15 (A brief recess was taken.) 16 AUDIENCE MEMBER: Thank you for taking my 17 This is a Jean Kessner. I asked comments. 18 Renee Vogelsang to read them because I didn't 19 have an opportunity to. I want very much to be 20 I'm Jean Kessner, Councilor-at-Large heard. 21 for the City of Syracuse. My committee is neighborhood preservation and environment in 22 23 that role, but more importantly in the role of 24 Elected Officials to Protect New York. EOPNY. 25 That's a consortium of more than 800 locally

elected officials from every county in New York 1 2 State who advocate on the behalf of the continuing moratorium on hydrofracking until 3 and unless health studies prove that fracking 4 5 is not harmful to human or environmental 6 health. EOPNY will be filing longer comments 7 separately within the deadline. But I'm here today to speak on behalf the organization and I 8 9 am coordinator of that organization. Our view 10 of the State Energy Plan, which in one word, is 11 that we find it lacking. While setting forth 12 and admirable goal of 80 percent reduction in 13 greenhouse gasses from the 1990 levels by 2050, 14 the plan lacks a strong roadmap for how to get 15 there. It sets no benchmarks or clear steps. 16 Inexplicably, the plan forecasts anemic growth 17 in renewable sources of energy. Instead it 18 actually promotes widespread expansion of 19 natural gas. It actually describes natural gas 20 as a clean fuel. Natural gas is a fossil fuel. 21 Burning a fossil fuel contributes to climate 22 change. Clean fuels are renewable, wind, 23 hydro, solar. And according to this plan's own 24 documentation, New York State more than doubled 25 it's output on renewables between 1990 and

2012, renewable in wind and solar. And that's a far bigger gain than any other power source in that same time. And although there are some good initiatives in this plan relating to renewables, we need to be more specific and we need more significant commitments to expanding the roll of renewable.

Contrary to this, unfortunately the plan 8 9 predicts that natural gas production in New 10 York State will triple by 2030. That's 11 intimating that New York's moratorium on 12 fracking will be lifted. It indicated that 13 production may well be even greater in this 14 state if permitting difficulties are reduced. 15 Permitting difficulties for hydrofracking are reduced. 16

Further, the plan promotes increased infrastructure for gas transmission and distribution, a misguided use of our state's resources and investments.

Fracking is not clean. A significant and rapidly growing body of science shows that fracking poisons water, air, land and it contributes to climate change. It releases methane, a potent greenhouse gas. Which brings

1 me to my next point. Just what are our goals 2 What are we trying to do? Again, this here? plan reaffirms New York's goal of reducing 3 total greenhouse gas emissions by 80 percent 4 5 from the 1990 levels by 2050. Yet this plan 6 only commits to measuring one greenhouse gas, 7 carbon dioxide, before 2030. This ignores methane, which is 30 times -- 34 times more 8 9 potent as a greenhouse gas over a hundred years 10 and 86 times more so over 20 years. 11 Significant amounts of methane are leaked 12 during the gas drilling and fracking process 13 and in the transportation of natural gas. 14 New York needs a plan that charts a course 15 for the future, that sets aggressive targets 16 for production of renewables and energy and for 17 greater environment efficiencies economy wide. 18 A plan that tightens building codes and ups 19 standards on appliances and aggressively 20 enforces those rules. We need to set our 21 sights high and lead the nation away from its 22 independence on fossil fuels. This will set us 23 on a brighter and healthier plan for the future 24 and it will create far more jobs than continued 25 reliance on dirty fossil fuels. Thank you.

1 MR. RHODES: Thank you very much. And 2 thank you for your persistence in coming. 3 AUDIENCE MEMBER: Thank you. MR. RHODES: I don't want to say anything 4 5 disparaging about this nice young woman, but it 6 was great to hear it straight from you. She 7 did her best job. 8 AUDIENCE MEMBER: Thank you. I care 9 deeply about this. I have four grandchildren. 10 MR. RHODES: We'll pause until we get 11 speakers. 12 Don Hughes is next. 13 AUDIENCE MEMBER: Thank you everyone in 14 attendance. This is a woman that taught both 15 of my kids math (indicating.) I'm Don Hughes. I have been a resident of New York State for 16 17 all of my life pretty much, except a very brief 18 stint in New Jersey which we don't want to talk 19 about that. But I'm here on behalf of myself 20 and the citizens of this great state and as a 21 leader in the local chapter of the Sierra Club. 22 I want to thank you for setting up these 23 hearings, what have been all across the state. 24 Particularly glad that this hearing extended 25 into the after work hours, otherwise I would

not have been able to present today. I want to 1 2 talk mainly -- I want to address the goals which are shown on Page 20 of the plan. It 3 says New York envisions a flexible and clean 4 5 energy system that empowers residential 6 customers, businesses and communities to 7 achieve the reliability and affordability they value. To achieve this, we'll focus on the 8 9 five on the following five areas, okay. So far 10 so good.

11 Goal number one. Goal number one is --12 must be to address the climate change. Must 13 be. Time is running out, gentlemen and ladies. 14 We have maybe 20 years to change the curve. 15 2013 we hit two benchmarks. One was that we 16 have put more carbon dioxide into the air than ever before and the other is that we've hit 400 17 18 parts per million. Scientists say that 350 is 19 a number that we can live with. We are now 50 20 parts per million past that. We're careening 21 off the cliff here. 450, that's when the 22 scientists say we're hitting a danger zone. 23 600, we're over the cliff. We're going two 24 parts per million per year. Do the math. 25 Speaking of math. We must decrease our

reliance on fossil fuels. I recommend to you 1 2 issue priority number one has got to be decrease our reliance on fossil fuels 3 50 percent -- and I'm sure you folks know the 4 5 numbers better than I do -- 50 percent of our 6 electricity comes from fossil fuels. We need 7 to make it a hundred percent of our electricity from fossil fuels free sources. We need to 8 move to renewables. I know there New York 9 10 State has some wonderful incentive programs in 11 place to encourage solar power, wind power. 12 Which is great and we're seeing development 13 along those lines, we're seeing wind farms upstate New York. The reports talk about the 14 15 charge increase, but we have to do more. 16 There's the -- this human condition, human 17 psyche of (inaudible.) I plead quilty myself. 18 I've got natural gas heating my house. I've 19 got a car which consumes gasoline. We need an 20 all out campaign to convince people to change. 21 We've got to change and we have to change fast. 22 I would like to have a world that my kids can 23 look forward to living in. I hear from parents 24 about how their children are not having 25 children because they're scared. Thev're

scared. It doesn't look good. We've got more 1 2 and more storms, Greenland is meting, the North Pole is disappearing and we'll be open water in 3 a matter of a couple decades. World government 4 5 is already preparing for that looking for oil, 6 looking for new -- the new military landscape 7 because of movement of ships. MR. RHODES: Sir, I don't want to 8

9 interrupt, but I will. I know we have a hard 10 stop time at 7:00. We just had another speaker 11 show up. I want to make you aware of that.

12 AUDIENCE MEMBER: Okay. Duly noted. I 13 also want to recommend to you that goal number 14 two should be that New York State is 15 independent. In other words, that it is 16 self-reliant for power. We don't import power, 17 we make our own power. So let's not import 18 power from Canada, let's not rely on importation from Ohio, let's do it ourselves. 19 20 And of course that means renewables, wind, 21 solar. We've got to push that as hard and as 22 fast as possible.

Number three, resilient flexible power
grid. Great, do it, I highly endorse it.
Thank you for putting that there. Give

customers more control over the energy. Again,
 great goal, keep it.

Aligning energy innovation with market 3 demand. Not sure what that means. But I would 4 5 add that we have got to consider nuclear power 6 as something that is going to go away. It is 7 just too expensive. It's not a fossil fuel 8 source but it's -- those plants are old and 9 they're going to phase out. And so, again, we 10 need to ramp up and put in more wind, more 11 solar. Denmark, Germany, great examples. The 12 fate of Fukushima has decided to turn up the 13 crank and they are going full bore on installation of full vortex. Let's do it here 14 in New York. Let's do it here. Thank you. 15 16 MR. RHODES: Thank you very much, sir. 17 You're on. 18 AUDIENCE MEMBER: All right. Thank you. MR. RHODES: Erin Carr. 19 20 AUDIENCE MEMBER: Yes, sir. Thank you for 21 this opportunity. I know it's been a long day, 22 I'm sure for you, so I will try to keep it 23 quick here. I'm a student ate ESF. I'm 24 studying renewable energy. And I see through 25 the studies that there's -- there's a way to do

1 this that will work. We can get ourselves out 2 of fossil fuels. The energy plan that you have is not -- does not change business as usual. 3 We're not providing a path to clean energy. 4 5 Instead, we're investing in a dying resource 6 base. Wind has an amazing potential here in 7 New York. Let's get on board with innovative stuff, such as Texas. They have a slightly 8 9 better wind resource space, they're maximizing 10 its potential, we can do the same. Solar is 11 also a viable resources here in New York. New 12 York City is full of rooftops and skyscrapers 13 that can effectively use solar where it is most 14 extensive to various buildings that attach to 15 it. Again, maximizing potential. Biomass is 16 also a good option. While some of my 17 environmental counterparts may disagree on this, it's up in the air I'm sure, there's a 18 19 way to maximize this resource as well. Energy 20 crops can be done on marginal farmland. And 21 our forest and subculture practices have 22 improved, so why -- we can imagine our forces 23 in a sustainability manner. When biomass is 24 used it combines heat and power systems. It 25 can provide high efficiency, clean burning

boiler systems. Another way to look at energy 1 2 comes from carbon sequestered in the growing and released in the burning. I understand this 3 is not necessarily carbon neutral, but it's a 4 carbon cost as well. It is still much better 5 6 than mined resources. Mined resources, such as 7 fracking or tar, are a clear case of selling those projects as jobs and energy to the US 8 9 citizens. When in reality the objective is to 10 restore. While there will be some benefits for 11 the jobs created, they're actually temporary. 12 This benefit will dry up over the subsequent one to two decades. That leaves our children 13 14 and subsequent generations with no benefits 15 from this type of projects. Our brothers, 16 sisters, neighbors, children and grandchildren 17 are the people we should be considering when we 18 plan our energy future. The proposed plan 19 relies on more natural gas infrastructure, 20 especially to heat our homes. The only way to 21 provide this fuel source is to import fracked 22 gas or begin fracking in our backyards. This 23 industry is very dangerous and can be easily 24 compared to the gold boom in the 1800s. For 25 any boom, there is consequential bust which

equals busted towns and broken communities that 1 2 mining has consistently left behind. The destruction to the earth and water where 3 extraction is happening is devastating to the 4 local communities which are effected. The scar 5 6 this leaves on our state is irreplaceable. The 7 10 to 20 years worth of productivity will take hundreds of years to superficially repair. And 8 9 the affects of those fuels to our atmosphere 10 could be the tipping point in climate change. 11 We are hovering on dangerous ground.

12 The energy needed to construct the 13 infrastructure and extract the resource coupled 14 with the eventual burning of said resource will 15 be felt in our climate change story. The money 16 and investment potential is much better suited to invest in sustainable use of renewable 17 18 technology. Renewable energy may cost as much 19 in energy terms as fracking. The difference is 20 that the jobs are sustainable. The destruction 21 left behind is minimal and the communities 22 affected will benefit and strengthen for 23 generations to come as a result of the 24 infrastructure. 25 Our society needs to change the way we

think. Band-Aids and quick fixes are very 1 2 short sighted and do not address the root of the problems. Our fossil fuel resources have 3 an important role to play in the transition to 4 5 renewable energy. Sooner or later we will have 6 to switch. Fossil fuels are limited. Let's 7 use these fossil fuel resources that we have, 8 the infrastructure here right now. Don't 9 expand it anymore. Don't bring more in. Let's 10 use this efficiently as possible in direct 11 relation to growing renewable energy, not 12 danger those resources in irreplaceable ways. 13 It's time to make responsible decisions about 14 our energy future. Decisions that consider 15 where we stand as a society and decisions that 16 positively affect the future of our children 17 and foster our responsibility as a race to care 18 for our mother earth. Thank you. 19 MR. RHODES: Thank you very much. 20 So if there are no further speakers? 21 Thank you from all of us to ESF. And thank you 22 on behalf of the State Energy Planning Board, 23 Jared, myself and our two colleagues who 24 managed to stay here through six of the hours,

25 mike Snyder from the Department of State, James

Bays from Ag and Market. On behalf of all of us, we thank you very much, you the commenters, for your comments. You have made excellent points and given us much to think about. We have undertaken the development of the draft SEP with great seriousness and it's important that we hear comments and questions like yours as we move to a final state. Please remember that written comments can be submitted on our website until April 30th, Energyplan -- one word -- dot.ny.gov. Thank you very much. (Whereupon, the hearing was adjourned.)

CERTIFICATE

I, LISA M. MIRANDA, a Court Reporter and Notary Public in and for the State of New York, DO HEREBY CERTIFY that the foregoing is a true and accurate transcript of my stenographic notes in the above-entitled matter.

Date: March 18, 2014.

Lisa M. Miranda

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