From: Robin Blair
Sent: Wednesday, November 04, 2015 4:20 PM
To: EMPupdate
Subject: Energy Master Plan Update

To Whom It May Concern,

I was very disappointed when the Governor, despite his supposed reputation to the contrary, broke his word given in 2009 to be a strong advocate for clean energy, a green economy and environmental responsibility when his administration adopted the 2011 Energy Master Plan.

However, now that the BPU is considering updating that plan, you can correct those mistakes. Please do everything in your power to advance the following policies now and remember even if you're in the minority on the BPU today, your opinion expressed strongly today can help build for a better tomorrow:

* Accelerate NJ's transition to a safe, clean energy economy using existing technology through aggressive but attainable goals -- 30% increase in efficiency by 2030 and relying on 100% fossil free energy production by 2050

* Just say no to the construction and expansion of new oil and gas industries and facilities in NJ

* Incentivize clean energy technology making the Garden State a hotbed for manufacturing, research and development, installation and maintenance of green technologies to create sustainable jobs

* Reduce existing equity and environmental justice issues by ensuring vulnerable communities especially benefit as we transition from a dirty to a clean economy.

Robin Blair

Shrewsbury, NJ 07702

From: Bill Harmon >
Sent: Tuesday, November 24, 2015 9:24 AM
To: EMPupdate
Subject: Thank You For Fighting The Off Shore Wind Farm Lobby

As a ratepayer in south Jersey I was pleased to read the article this morning "NJ bullish on natural gas, not offshore wind" in the AC Press.
The cost saving economics of the proposed Fisherman's Energy Wind Farm are dubious at best. The current business case can only be justified via heavy federal and state subsidies.
Most important to me is the visual blight that will be created in the ocean if windmills are allowed to be placed within view from our beautiful south Jersey beached. In addition, the damage to our tourism industry will be significant.

Bill Harmon
Marmora, NJ

From: Tom Clark
Sent: Saturday, November 28, 2015 8:43 AM
To: EMPupdate
Subject: Energy Master Plan

Dear Mr Reinert and committee members,

I am writing to voice my concerns about the state's lack of faith in offshore wind and its continued pursuit of fossil fuels to power our state. Two contracts have just been awarded to companies that will build offshore wind sites. Until these have been installed and running, how can we denounce their potential or efficacy in energy generation? European nations like Germany are deriving a substantial amount of energy from wind and solar. These are proven methods of energy generation. It is time for New Jersey to be a leader in the future of energy.
I have two children, 5 and 2. It is my hope that we can leave them a cleaner and brighter future that is not reliant of fossil fuels.
Furthermore, I believe that running a pipeline through the pine barrens is not the answer to our problems. At this time, when gas is cheap, it seems like a great idea to invest heavily in its infrastructure. But in a world so volatile and subject to energy price spikes, it makes all the more sense to invest in wind and solar. The sun will always rise and set. The wind will always blow. They are not subject to the avarice and insanity of man.

Please consider these comments, and know that any choices the committee makes will affect citizens for years to come. Thank you in advance.

Sincerely,

Tom Clark
Cape May Court House, NJ

From: leslie sauer
Sent: Thursday, December 03, 2015 9:55 AM
To: EMPupdate
Subject: Comments on 2015 Update NJ Energy Master Plan

Comments on the 2015 NJ Energy Master Plan

3 December 2015

Submitted by Leslie Sauer, 679 Rosemont Ringoes Rd, Box 45, NJ 0557.

I am writing to comment on the proposed 2015 NJ Energy Plan. My first concern is that the fourteen day review period is far too short, especially given its release just before the Thanksgiving holidays.

The 2015 NJ Energy Plan is a travesty and a complete betrayal of the overwhelming number of NJ residents who support sustainable energy over further oil and gas development. It is absurd that a New Jersey State document cannot use the 'C' words- climate change. Even if our governor does not see climate change as a crisis, the residents are experiencing its impacts all across the State.

If one only looked at the table of contents, the plan would look pretty good. But when you actually read it you realize the 'update' of the plan is all about natural gas. It is the only answer everything like lower prices and a diverse portfolio. The plan takes a completely dismissive attitude toward renewables and claims the state is limited in its ability to use renewables because of its size and density. No, it is limited due to politics. This plan completely ignores how rapidly the residents, schools and businesses adopted solar when the cost is reasonable. The current tax credit limits this opportunity to wealthier individuals and misses the opportunity to address energy needs of the poor at the same time.

The plan is not even based on sound science. The plan states that the use of natural gas produces fewer greenhouse gas emissions. This may be true at the tailpipe or where it is burned but uncontrolled and excessive leakage rates throughout the production and transmission make natural gas as bad as coal. This plan should have more focus on reducing this leakage before suggesting increased reliance on natural gas. Beyond the greenhouse related problems, gas leakage is also associated with major health effects as well as the possibility of explosion, all ignored by this plan. It does not even acknowledge that the regulations its touts for safety are ignored by any interstate pipeline.

This plan assumes the continued and rapid proliferation of pipelines and their associated infrastructure such as compressors despite the devastating impacts to the environment, communities and landowners. As the prices for fossil fuels continue to fall and pipeline usage is only 43% in the Northeast, this plan assumes continued growth in what may be an energy bubble. Shale gas fields play out in only a few years because of the low porosity of shale, yet the ratepayers are expected to invest huge sums in what may be useless and stranded assets in the near future.

Pipelines in NJ are rightly meeting unprecedented resistance. The PennEast pipeline, for example, is opposed by every township in its path and most local officials. Over 80% of the residents have refused access to PennEast. Other pipelines, like the Pilgrim, Transco Leidy, and the Pine Barrens pipelines lines, are facing similar opposition. This plan ignores all these concerns. In the meantime we will have missed the opportunity to invest is renewables and squandered our investment.

It is shameful to sacrifice the long term future of our residents to the short term, funding raising needs of the presidential ambitions of our soon-to-be ex- governor. This plan should be rejected and completely reworked with the goals of the residents of NJ and the health of our planet at its core instead.

GRAMMES

Grandmothers Mothers & More for Energy Safety

PO Box 923, Normandy Beach, NJ 08739 732-830-6226

GRAMMES Comments: New Jersey Energy Master Plan 2015 Update

While this updated version of the 2011 NJEMP lauds the Plan's vision:

> "...It has provided long-term goals and implementation strategies flexible enough to respond to market changes and new information about **the relative merit of competing energy technologies and strategies..."**

There is little evidence that there has been any **serious analysis of the relative merit of competing technologies and strategies since 2011.**

There is also little evidence in this update that the original five over-arching goals in the 2011 EMP have much mattered or been addressed.

2015 FIVE OVERARCHING GOALS

1. Drive Down the Cost of Energy For All Customers
2. Promote a Diverse Portfolio of New, Clean, In-State Generation
3. Reward Energy Efficiency and Energy Conservation/Reduce Peak Demand
4. Capitalize on Emerging Technologies for Transportation and Power Production
5. Maintain Support for the Renewable Energy Portfolio Standard

We have no disagreement with " ...The production and distribution of clean, reliable, safe, and sufficient supplies of energy is essential to New Jersey's economy and way of life." We have much disagreement however regarding the report's usage of words and their meanings. Words like clean, safe and reliable have been designated for the support of energy technologies that are not safe, clean or and (in a world of severe storms and terrorist plans) far from reliable.

Unless we have decided we are ready to live in a world of "Alice in Wonderland" incoherent prattle and bluster, conclusions about renewable energy in the report need to be thoroughly questioned, i.e., *"While the future may bring change, offshore wind in the U.S. is not economically viable at this time"*.... Compared to what? Compared to nuclear? Compared to threatening water quality with fracking waste? Compared to more and more exorbitant subsidies for the fossil fuel industry? Compared to the cost of recovering from another rail gas explosion? Compared to the environmental disruption and danger to towns and cities from gas pipelines crisscrossing heavily settled communities?

One cannot even utter the word economics in the same breath as nuclear power. The billions and billions of dollars spent worldwide in the quest for a solution to nuclear waste has so far yielded no solutions. The cost and delays of construction, as PSEG has stated, would gobble up all their capital. Nuclear cannot be built on time, on budget or cleanly. Nuclear is not safe, clean, economical, and to keep using the words "clean energy" to categorize it, is "Alice and Wonderland" babble at its best.

The amount of dissing of solar in this EMP update flies in the face of current reality. In fact the ignorant or deliberate dismissal of renewable energy technologies in this report is notably archaic. The number of countries, cities, towns and businesses that have already achieved 100% renewable status is growing rapidly. E.g.: Aspen, Colorado, Carinthia Australia, Greensburg, Kansas, Iceland, Whole Foods, North Face, and Apple, to name just a few. Vermont, California, Germany, Denmark, Scotland, Sydney, Australia and New York State are just a few of the locations where aggressive renewable energy are being mandated. Sadly, with these proposed "revisions" to the EMP, New Jersey, once in the lead, now looks like we prefer scrap heap energy policy.

Respectfully submitted,

Paula Gotsch, Co-founder

GRAMMES

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Laurence M. Downes
Chairman and
Chief Executive Officer

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Email: lmdownes@njresources.com

December 4, 2015

The Honorable Richard Mroz, President
New Jersey Board of Public Utilities
44 South Clinton Avenue
Post Office Box 350
Trenton, New Jersey 08625-0350

Re: Comments on the November 2015 Update of the Energy Master Plan

Dear President Mroz:

New Jersey Natural Gas (NJNG) is pleased to offer comments on the November 2015 Update of the Energy Master Plan (EMP Update), and appreciates the efforts of the staffs of the New Jersey Board of Public Utilities (BPU) and Department of Environmental Protection. It is a challenging undertaking to balance the energy needs of our state, enhance job growth and boost the overall economy, while continuing to protect our environment. The EMP Update succeeds in achieving these objectives by encouraging a comprehensive and diverse energy portfolio, as well as advancing clean energy and energy efficiency. We look forward to continuing to work with you to reduce the economic burden of energy on New Jersey's residents and businesses, while making the necessary infrastructure investments needed to ensure the provision of safe, reliable and resilient lifeline services.

The EMP Update provides a thoughtful review of the progress made toward the 2011 Energy Master Plan goals, while proposing key recommendations for corrective action, where necessary. Further, the new section to address Energy Infrastructure Resiliency and Emergency Preparedness and Response is a strong addition. It reflects the many lessons learned in the aftermath of Superstorm Sandy and sets the course for new strategies to enhance the ability to ensure minimal disruption to energy usage for New Jersey residents and businesses.

The BPU is to be commended for its leadership and recognition of the importance of investment in infrastructure, resiliency and energy efficiency to safely and effectively meet the growing energy needs of our state. We appreciate the opportunity to share our

comments and look forward to working with the BPU, Rate Counsel and other stakeholders toward the goals and recommendations contained in the EMP Update.

Sincerely,

Laurence M. Downes
Chairman and CEO

CC: Commissioner Upendra Chivukula
Commissioner Joseph Fiordaliso
Commissioner Mary-Anna Holden
Commissioner Dianne Solomon
Secretary Irene Kim Asbury
Kathleen T. Ellis

I am writing to comment on the Updated Energy Master Plan recently released. Although there are a few high points, for the most part, the focus seems to be on developing "natural" gas infrastructure and defending the nuclear industry. Although the large percentage of our energy mix that comes from nuclear reactors in our state is indeed a contributor to our low rate of emissions, that does not mean that we are using actual clean energy—the emissions created by nuclear energy are not at the final generation site, but are emitted in southwestern U.S.A. or Australian uranium minefields, in the transportation and enrichment of that mined uranium, and the danger lies (among many places) at the reactor sites where irradiated fuel rods languish in cooling pools, or at best in hardened on-site storage. Although this plan mentions a national storage facility, prospects are not good, and even if a site for such storage were to be found and a facility built, transporting those fuel rods is not a safe, easy, clean procedure—anything but.

This update dwells to a large extent on the expansion and enhancement of a"natural" gas transmission and distribution. While there are current cost advantages to this fuel, as we learned between 2011 and now, such advantages can change rapidly and dramatically. This has worked to the state's advantage (moving from 17th highest to 46th highest in electrical cost), but there is no guarantee that it will continue—in fact, if we become a net exporter to the foreign market, the domestic price is likely to rise, decreasing that current advantage. Given this uncertainty, one must consider whether the environmental and public-safety risks of expanding this system is worth doing. Prices vary; we should invest in the certainty of a cleaner environment with a stronger focus on renewable energy and on the storage and transmission of same.

In addition, compressor stations leak—and they leak methane, which is a much more potent greenhouse gas than carbon dioxide. Most of the methane these days comes from hydrofracturing—not the hydrofracturing of the 20th century, but the 21st-century horizontally-drilled hydrofracturing, which is creating great environmental damage—earthquakes, poisoned water, and the like outside our state. Just because it is not in our borders does not exempt us from the consequences of our actions—moral if not physical. Equally important, perhaps, is that every dollar that is spent expanding our "natural" gas system is a dollar that is lost to cleaner renewable technologies: solar, wind, tidal, and the like; a dollar that cannot be spent on microgrids, distributed generation, and resiliency features that are among the best parts of this updated plan. Combined heat and power is a sensible means on which to focus—the heat and power are both products of generating plants should be used to their full capacity.

Alternative-fuel vehicles are an exciting growing trend to help New Jersey reduce our emissions and clean our air—but replacing diesel with compressed "natural" gas, other than that which we can capture from landfills (which is something that we should be emphasizing; escaped methane from landfills is a wasted resource, that compounds the problem by the potency of its greenhouse effect), it is another step along the 19th-century fossil-fuel path. Instead, we should be looking to biodiesel that can be used in our vehicles most of the year, using our waste cooking oil and potential new crop sources.

The showpiece of any energy plan should be increased efficiency; the most cost-effective megawatt is the "negawatt"—the one you never generate, because you have stopped a leak, found a more efficient way to heat, light, or propel. Better storage and conservation, combined with a demand response program, could allow us to shutter the costliest, dirtiest energy generation, further improving the picture.

The update makes the statement that "[m]arket forces and customer interest can quickly overwhelm policy objectives". While true, that seems to negate the fact that the state can also affect trends, either by financial

incentives or marketing campaigns. We railed at the cost (and inherent untruth) of the "stronger than the storm" ad campaign, but it was created with a specific state goal in mind—bringing tourists to our shore areas—and an anti-gas-guzzler campaign, one extolling the benefits of electric vehicles, combined with enough charging stations to make them practical to own and drive, could well be a factor in the advancement of that market.

Although we are meeting our renewable-energy standards with out-of-state generation, the bulk of our energy is generated in New Jersey, and if we are offsetting dirtier in-state generation with credits from purchasing from outside the state, we are not necessarily improving our own air quality. Yes, it is good to help other states clean up their air, just as we would like to discourage them from dirty extraction and generation methods, but we must also look at our own in-state generation. Although this update maintains the 70% by 2050 goal for clean energy, that percentage is based on the inclusion of "natural" gas and nuclear energy; we could do better (see). Failing that, we should adopt a percentage based on actual clean renewables so that we are not misleading the public as to our real situation.

I am deeply concerned about the section titled "Evaluate Lost Nuclear Capacity". We have known for some time that Oyster Creek is scheduled to close in 4 years—10 years after its designed life—and should have been preparing for that. "Accelerat[ing] a federal solution to the problem of storing nuclear waste" may or may not be important in regards to the waste already generated—the thought of transporting it, whether by truck, train, air, or ship, scares me to death; the potential for accident or attack, though possibly small, is enormous in the magnitude of risk. However, with (a) what we have seen so close to home at Three Mile Island (which we have learned was much more serious than was reported at the time), and across the planet at Chernobyl and Fukushima Daiichi, and (b) the cost overruns and delays at every plant under construction now, we should realize that nuclear was a digression, it is not a good solution, and we must look for alternative solutions, not focus on its loss. The call for "objective assessment" seems to want something other than serious scientific and financial evaluation, something other than prudent risk management. Nuclear power, regardless of biased definitions, is not clean power—ask those who live near uranium mines, ask those who live in communities around nuclear plants where studies have shown increased thyroid cancer and childhood leukemia, ask fisherfolk about the fish kills. We must let Oyster Creek and the others close as scheduled, with plans for a responsible decommissioning and oversight of the vast quantity of irradiated fuel rods that are stored on site.

As I stated earlier, promoting expansion of gas pipelines is simply encouraging our addicted state to use the dirty needle—we must wean ourselves onto healthier, cleaner, renewable alternatives with all possible speed. Although "natural" gas may seem cheap and abundant now, such situations can turn rapidly—as we saw with between the 2008 and 2011 plans—and investing in infrastructure simply means putting in place an incentive to continue hydrofracturing regardless of cost—the investment will be cited as a reason to continue down an unsustainable path.

The definition of clean power must not include nuclear or "natural" gas—if that means lowering the percentage of clean power in our goal, so be it. That would be better than fooling the gullible into thinking that we are doing better than we really are in protecting the public health and safety, our environment, and contributing to a global reduction in CO_2 in our atmosphere. If we have met our previous goal, we should challenge ourselves to do even better, not rest on our laurels and ask for recognition.

I read with dismay that the state merely "strongly discourages the use of subsidies to turn productive farmland and open space into grid-supply solar facilities". Why is this not simply prohibited? We have much too little open space, our farmland is disappearing too fast—there should be absolutely zero subsidies for this destruction.

With our quantity of coastline, we should look for technologies that can be located off-shore without damaging the marine environment, commercial and recreational fishing and boating, and our tourist industry: off-shore wind and tidal power. Although not commercially viable yet, it seems, there are signs of progress: a large federal grant for off-shore wind project and a proposal for off-shore wind at the proposed location of the recently-vetoed (again) Port Ambrose LNG facility. Our state, with much technical expertise within our borders, should be leading the way in both wind and tidal energy.

I am pleased to see less emphasis on smart meters in this update—those produced so far have not been as effective as hoped (commercial firms have an incentive to make products cheaper to reduce sales price, which often means lower quality) and there are serious concerns about the safety of the meters for those sensitive to electromagnetic radiation. Instead, we should focus on net metering, community solar, and other innovations, including a smarter grid.

It is good to see resiliency addressed in this plan; events like Superstorm Sandy are likely to happen more frequently in the future. However, the statistics quoted—143 events causing an outage greater than 5 minutes, only 27 for more than a day in a period of 28 years averages out to 5 a year, only one annually more than a day, are pretty good. We cannot allow this to get worse, of course, but we also cannot expect to never have a blackout. Mother Nature actually is stronger than we are.

I am concerned that "vegetation management", not relocating wires underground, is suggested to avoid wind damage. It is worth the investment to do it right.

All in all, I am extremely disappointed in the focus on expanding gas pipelines and the emphasis on nuclear energy, but heartened at the progress being made in renewables.

NJUA
NEW JERSEY UTILITIES ASSOCIATION

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December 4, 2015

VIA ELECTRONIC MAIL
Irene Kim Asbury
Secretary of the Board
New Jersey Board of Public Utilities
44 South Clinton Avenue
Trenton, NJ 08625
EMPUpdate@bpu.state.nj.us

Re: Draft New Jersey 2011 Energy Master Plan Update

I write on behalf of the energy utility members of the New Jersey Utilities Association (NJUA), specifically, Atlantic City Electric Company, Jersey Central Power & Light Company, New Jersey Natural Gas Company, Pivotal Utility Holdings, Inc. d/b/a Elizabethtown Gas, Public Service Electric and Gas Company, Rockland Electric Company, and South Jersey Gas Company in response to the request for comments on the Draft New Jersey 2011 Energy Master Plan Update (Draft Update). NJUA represents 16 investor-owned utilities that provide electric, natural gas, telecommunications, water and waste water services to residential and business customers throughout the State. We appreciate the opportunity to offer comments on the Draft Update. These comments reflect the consensus views of the above-referenced energy company members.[1]

NJUA and its member companies sincerely appreciate that the Administration has taken a thoughtful and measured approach in updating the State's Energy Master Plan (EMP). Further, NJUA is grateful to the Administration and the Board of Public Utilities (BPU) for conducting a deliberative review of the State's energy policy and for considering the comments of all interested parties, including our own.

Specifically, we are appreciative that the Draft Update includes the creation of a new overarching goal regarding improvements to energy infrastructure resiliency.[2] We are pleased that the Draft Update notes that the expansion and upgrading of New Jersey's natural gas interstate and intrastate pipelines will help lower the cost of energy in the State and reduce emissions.[3] Also, we welcome the State's commitment to "continue to facilitate the infrastructure needed to support the broader use of alternative fueled vehicles" such as compressed natural gas (CNG) and electric vehicles (EVs).[4] Yet, there are issues that remain unaddressed which we respectfully recommend for inclusion in the final EMP Update; specifically, the cost shift that occurs between non-net metered and net metered customers, and rate design as it relates to infrastructure investment.

[1] NJUA previously submitted comments on August 13, 2015 on this matter. Those comments (attached to this filing) are incorporated herein by reference.
[2] Draft EMP Update, pg. 46.
[3] Draft EMP Update, pg. 5.
[4] Draft EMP Update, pg. 12.

Net Metering Considerations

As noted in our initial comments, the proliferation of net metered distributed generation, particularly solar (PV) generation[5], has led to a growing concern nationally about a "cost shift" from net-metered to non-net-metered customers. The potential for this cost shift was recognized in the 2011 EMP statement that "these behind-the-meter solar programs are costly for non-participants, i.e., ratepayers who do not host a solar installation, yet pay for the subsidies in their monthly electric bills."[6] We reiterate our concern that, under the current system,[7] this cost shift is more likely to affect seniors and low-income households who can least afford to subsidize net metered customers. As such, we respectfully request that the EMP Update direct the BPU to explore ways to address or compensate for the cost shift.

Financing Infrastructure Investment

In recent years, New Jersey has been struck by a number of severe weather events which have challenged the resiliency of our energy infrastructure. It is not in dispute that the development of storm hardening and resiliency improvements are required and NJUA member companies have proactively addressed that need through capital expenditures in New Jersey averaging more than $4.4 billion per year – investment that, as noted in the Draft Update, "strengthens and enhances the State's economy and critical infrastructure."[8] It should also be noted, however, that there is a direct link between infrastructure investment and rate design. As such, we ask that you consider our recommendation that support for implementation of programs and regulatory cost recovery mechanisms that enable New Jersey energy companies to effectively and efficiently increase resiliency be included as a central element of the Administration's strategic energy vision.[9] In addition, we also ask that you consider our suggestion that the EMP encourage the BPU to continue to consider, where appropriate and with utility input, the implementation of innovative cost recovery mechanisms for infrastructure investment that allows the utility timely recovery of investments as they are made.[10] The Draft Update notes that New Jersey's natural gas prices are among the lowest in the country, leading to a significant reduction in the price of electricity.[11] Thus, conditions are ideal for implementation of innovative rate design.

Conclusion

In conclusion, we appreciate the opportunity to submit comments regarding the Draft EMP Update and to work with the BPU in enhancing the goals of the 2011 EMP consistent with industry and

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[5]See NJUA Comments dated August 13, pg. 2 citing a study which found that "[i]n the past half-dozen years, U.S. PV Capacity has expanded from less than 1,000 MW to more than 18,000 MW. Recent growth has been aided in part by a 50%-70% drop in reported PV prices...." Excerpt from Massachusetts Institute of Technology, *The Future of Solar Energy, an Interdisciplinary MIT Study* (2015), http://mitei.mit.edu/system/files/MIT%20Future%20of%20Solar%20Energy%20Study_compressed.pdf, (herein referred to as ("MIT Study")

[6] 2011 EMP, pg. 5.

[7] See NJUA Comments dated August 13, pg. 5 citing the description of the cost shift as provided in the MIT Study.

[8]Draft EMP Update, pg. 1.

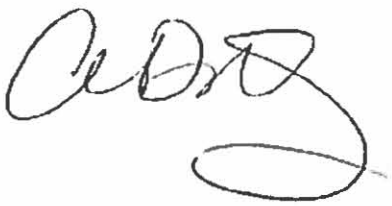
[9] NJUA Comments dated August 13, pg. 2.

[10]See NJUA Comments dated August 13, pg. 2 which discusses the application of rate adjustment mechanisms to infrastructure resiliency programs in greater depth.

[11] Draft EMP Update, pg. 3.

technological developments and in consideration of the changing economic landscape since the 2011 EMP was adopted. NJUA is available to serve as a resource for information or to facilitate discussions between BPU and Administration Staff and member companies. A number of our member companies will also be providing more specific comments for your review. For your reference, we have also attached our initial comments to this filing. Thank you for your consideration.

Respectfully,



Andrew Hendry
President and Chief Executive Officer
New Jersey Utilities Association

SIERRA CLUB
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NEW JERSEY CHAPTER

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December 4, 2015

President Richard Mroz
New Jersey Board of Public Utilities
PO Box 44 S. Clinton Ave
Trenton, NJ 08625

RE: New Jersey Sierra Club Comments on 2011 Update to Energy Master Plan

Dear President Mroz:

Thank you and the Board of Public Utilities for accepting these comments. The BPU update of the 2011 Energy Master Plan is crucial, especially since after 2011 New Jersey has experienced devastating climate impacts from Hurricane Sandy, an increase of flooding, and more severe storms. In light of the current commitments being made by world leaders at the United Nations Climate Change conference, we believe it is even more important for New Jersey to make aggressive goals to reduce greenhouse gases and carbon pollution to protect us from climate change.

In 2011, the major difference between the 2008 EMP was that it reduced our renewable energy goals and increased fossil fuels. This shifted the state from utilizing renewable energy to natural gas. We have the tools to reduce greenhouse emissions and make sure that New Jersey's energy future is built on clean renewable energy and energy efficiency. Our state was on track to meet the clean energy goals outlined in 2008, but instead this setback has cost the state economic stability and critical pollution reductions. We believe the EMP must go back its original goals to achieve 30 percent renewable energy and 20 percent energy efficiency by 2020. The EMP Update offered by the Board of Public Utilities does not do so.

During the public comment period of the EMP update, the public overwhelmingly called for more renewable energy and a commitment to our former goals. New Jerseyans have demanded action on climate change, green job creation, and alleviating our dependence on fossil fuels. Out of 1093 written comments, 144 were submitted by Sierra Club members who wanted more aggressive goals that move us forward. We demanded that we expand our Renewable Portfolio Standard meet the 30 percent by 2020 goal. Our comments also asked that we must go beyond the 2020 horizon and adopt 80 percent renewable energy by 2050. These goals will allow the state to comply with the Global Warming Response Act. Currently the state does not have an energy efficiency standard. We called to push for a 20 percent reduction in energy use by 2020 and 30 percent reduction by 2030 through efficiency and implement an Energy Efficiency Resource Standard.

New Jersey has fallen behind other states when it comes to clean energy and clean energy jobs. We were 2nd in the nation for solar installations and we're now 7th. We had 10,000 jobs in solar and are down to 5,500. We were 7th in energy efficiency and are now 21st. We were supposed to be the first state in the nation to have offshore wind. Even though five years ago Christie signed the Offshore Economic Development Act and the EMP calls for 3,000 megawatts of wind power, the Christie Administration

has blocked financing rules for offshore wind. The EMP can allow us to adhere to the law to reduce greenhouse gas emissions. The Global Warming Response Act requires the state to reduce GHGs from electricity 80 percent by 2050. We can re-enter the Regional Greenhouse Gas Initiative (RGGI), implement the Off Shore Wind Law, and increase the Renewable Portfolio standard for solar. Wind is the most cost effective way to achieve our goals. We have enough to meet a third of energy needs. By adopting a strong commitment to renewable energy, our state can be there again.

The 2011 update should not include the building of new fossil fuel power plants. It should have phased out use of coal completely and closed the current coal plants in New Jersey. By retiring the dirty coal plants like the Mercer and Hudson Generating Stations, we can prevent serious health impacts, especially near environmental justice communities. According to the report Toll from Coal, 531 people in New Jersey die each year from coal related deaths. There are 445 hospitalizations and 987 heart attacks in New Jersey from coal plants. Last summer, New Jersey had over ten Ozone Action Days where sensitive individuals were told to stay inside because of poor air quality. Many of these public health threats could be prevented by ending our use of coal and shifting to renewable energy.

All existing power plants in New Jersey should be required to install closed loop systems and depletive use from discharging superheated water must be ended. By using systems like cooling towers, this will prevent loss of water and protect ecosystems from impingement and fish kills. More importantly, it will reduce chemical pollution like metals from entering our Bays and waterways.

Instead of pushing for destructive pipelines and fossil fuel plants, our natural gas plants should also be closed and changed to renewable. Fracking for natural gas creates devastating health impacts to surrounding communities and the frack waste can end up in New Jersey. The old plan shifted us from increasing renewable energy to more natural gas. Since the 2011 EMP, three new natural gas plants are being built. New Jersey should be ending subsidies for traditional fossil fuel power sources and investing in renewable energy and demand response

By pulling out of RGGI, our state lost $1.25 million in revenue and more than 1,800 jobs. New Jersey was poised to be the first state in the nation with offshore wind. Offshore wind projects could provide a third of our energy needs and provide 3,000 megawatts worth of energy by 2020, which is in the EMP. If we had that energy supply, we could close down the Oyster Creek Nuclear Power Plant, BL England, and not have to open the three natural gas plants being built.

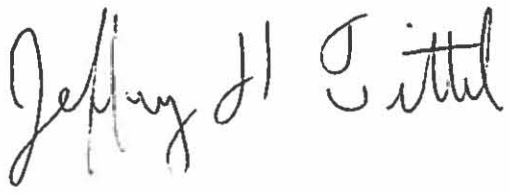
RGGI worked; New Jersey received over $40 million a year and it created over 1,800 jobs. It reduced carbon pollution by 18 million tons. RGGI will help implement the EMP and Clean Power Plan goals and provide funding for energy efficiency. Energy efficiency cuts peak demand, preventing the use of weaker plants, which prevent blackouts, air pollution, and saves New Jersey residents' money.

President Obama's Clean Power Plan (CPP) calls for only a modest 23% reduction in greenhouse gases by 2030 in New Jersey. We can achieve even more than that goal and have the tools in place to go above the federal requirements.

Communities throughout New Jersey are being impacted by air pollution and fossil fuel plants while our open spaces and environmentally sensitive lands are being targeted by pipeline after pipeline. People are also concerned about oil bomb trains and dirty fuel infrastructure that is unsafe and cutting through their communities. We must end the use of power plants and pipelines polluting in our state and make a real switch to solar, wind, and other renewables.

Thank you and we forward to discuss these comments further with your staff.

Sincerely,



Jeff Tittel
Director, New Jersey Chapter of the Sierra Club

Fishermen's Energy, LLC
1616 Pacific Avenue, Suite 400
Atlantic City, New Jersey USA 08401
Phone 609-350-7455

December 4, 2015

EMP Update
Board Secretary
P.O. Box 44 S. Clinton Avenue
Trenton, New Jersey 08625

Via email: EMPupdate@bpu.state.nj.us

Madame Secretary:

Please accept the following comments on behalf of Fishermen's Energy regarding the Draft Update to the 2011 Energy Master Plan. We testified at the August Hearing at Stockton University and provided written comments, with exhibits, at that time. These comments are in response to the release of the Draft document.

The Draft points out "the rigors of the offshore environment and the associated technological challenges for construction, operation, and maintenance, put upward pressure on the costs of any offshore wind project...For a project to be approved, it is critical that a developer demonstrate the project's net economic and environmental benefits." OWEDA also called for 1100 megawatts of offshore wind and specifically called for 20-25 megawatt project in state waters off the coast of Atlantic City.

The Fishermen's Atlantic City Wind Farm provides the statutorily mandated vehicle for "demonstrating" the economic and environmental benefits of offshore wind. Fishermen's urges the State to follow its own recommendation, to "examine the potential for offshore wind projects to become part of the State's energy portfolio" by opening a window for the submission of a new reconfigured submission using proven technology and traditional project financing. Fishermen's welcomes the opportunity to present a project that is economically and environmentally viable.

Very Truly Yours,

Paul J. Gallagher, Sr., Esq.
COO and General Counsel

Fishermen's Energy, LLC
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Atlantic City, New Jersey USA 08401
Phone 609-350-7455

Good Afternoon, President Mroz, Commissioners. Congratulations on your re-appointment.

On Thursday I heard testimony about the lack of support of regional chambers of commerce for offshore wind. Attached to my written comments is a February 2014 Policy Position taken by the Greater Atlantic City Chamber in support of the Fishermen's Energy Atlantic City project. There is also an Atlantic County Board of Chosen Freeholder's Resolution urging the New Jersey Board of Public Utilities to approve the Fishermen's Energy Atlantic City Windfarm Project. (Resolution 116 is dated February 25, 2014).

Five years ago Wednesday the Governor's Office issued a press release on the signing of the Offshore Wind Economic Development Act of 2010. "The Offshore Wind Economic Development Act will provide New Jersey with an opportunity to leverage our vast resources and innovative technologies to allow businesses to engage in new and emerging sectors of the energy industry. Developing New Jersey's renewable energy resources and industry is critical to our state's manufacturing and technology future. My Administration will maintain a strong commitment to utilizing energy as industry in our efforts to make our State a home for growth, as well as a national leader in the wind power movement."

President Kennedy once told us that "The time to repair the roof is when the sun is shining." [State of the Union Address January 11 1962]. His predecessor in office Dwight D. Eisenhower points out that "Plans are nothing; planning is everything."

The Offshore Wind Economic Development Act... directs the BPU to develop an OREC program to support at least 1,100 MW of generation from qualified offshore wind projects. OWEDA also: (i) authorizes the BPU to accept applications for qualified offshore wind projects; (ii) sets forth the criteria to be used by the BPU in reviewing the projects' applications; and (iii) authorizes EDA to provide up to $100 million in tax credits for qualified wind energy facilities in wind energy zones. (EMP page 70).

OWEDA calls for at least 1,100 MW (installed capacity) of offshore wind generation on the outer continental shelf in the Atlantic Ocean. Like solar, the offshore wind provision is also defined as a carve-out from the total Class I requirement. (EMP page 37).

Offshore wind has been supported by the Christie Administration for a number of reasons. It is renewable, has no carbon output, and has the potential to develop a manufacturing and support industry within the State, thereby creating direct, indirect, and induced economic benefits for many years to come. OWEDA is based on all three of these elements being

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recognized in the review and cost-benefit analysis of any proposed offshore wind project. Although the capital cost of offshore wind is roughly twice the capital cost of onshore wind, offshore wind has higher and more consistent capacity factors than onshore wind, thus helping to reduce the net cost of producing energy and RECs from offshore locations. Capital costs increase with water depth, so the further away from shore and the deeper the installations, the more expensive the wind plant. Coastal and shallow water installations have the advantage of offshore wind characteristics at a lower cost. (EMP Page101)

Maintain Support for Offshore Wind. On February 10, 2011, the Board adopted new rules for offshore wind to codify the statutory requirements of the OWEDA. The rules provide a framework for approving applications for projects and setting OREC prices. They will remain in effect until August 2012 when the State will readopt the regulations. The Board will have 180 days to approve or deny applications once they are submitted. The application requirements include a cost benefit analysis for the project as well as a proposed OREC pricing method and schedule. The burden remains on the applicant to propose a reasonable OREC price which can be fixed for the proposed term or for every contract year. It is assumed that OREC pricing would represent the project's revenue requirement after tax credits and other subsidies, minus the estimated value of the spot energy market and capacity prices. If the BPU finds the proposed OREC price is too high, the BPU has jurisdiction to approve a lower OREC price that would still allow the applicant to satisfy the cost-benefit standards. (Page 108).

Margaret Thatcher's advice was to "Plan your work ... then work your plan."

The offshore wind industry supports the work that was planned in the 2011 EMP and asks only the State work its own plan. We are pleased by Thursday's announcement that the BPU will be retaining consultants to finally draft the OREC regulations that were called for in the 2010 Law. One need only to look to Maryland which with the right consultants drafted and implemented OREC regulations in less than eight months. We have been waiting for New Jersey's since February of 2011.

As pointed out on page 70 of the EMP, OWEDA authorizes the BPU to accept applications for qualified offshore wind projects. It has exercised that authority only once for a project it has now rejected three times. We also believe that the BPU should "open the window" and accept new applications for both near shore and offshore projects. It may be that the federal water projects need to wait for final OREC rules, but expect the federal government to move forward in the near future to issue leases off of New Jersey. This administration is nearing the homestretch and the offshore leasing process will be completed well before they leave office.

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I would be remiss if I did not suggest the Fishermen's Energy Atlantic City project is fully permitted, satisfies the EMP criteria, complies with each and every element of OWEDA, has won a $51 Million US DOE grant and should be approved. As I pointed out earlier, if the BPU finds the proposed OREC price is too high, the BPU has jurisdiction to approve a lower OREC price that would still allow the applicant to satisfy the cost-benefit standards. (Page 108).

If the BPU had a patron saint, it would be Thomas Edison. "Being busy does not always mean real work." He said. "The object of all work is production or accomplishment and to either of these ends there must be forethought, system, planning, intelligence, and honest purpose, as well as perspiration. Seeming to do is not doing."

Unfortunately, we can't ignore the harsh reality of Mike Tyson: "Everybody has a plan until they get punched in the mouth."

Issue the regs; Open a window; Approve the Fishermen's Project.

Thank you.

Paul J. Gallagher, Sr., Esq.
COO & General Counsel

Greater Atlantic City Chamber

Policy Position

Whereas, Fishermen's Energy , LLC has proposed a 25 megawatt demonstration offshore wind farm three miles off Atlantic City projected to cost $185 million: and

Whereas, New Jersey has a renewable portfolio standard (RPS) law that requires that 22.5% of NJ electricity consumption be produced from renewable resources by 2021 and current renewable energy production is approximately 2% of total statewide electric consumption, and

Whereas, the New Jersey Energy Master Plan has targeted the creation of an Offshore Wind industry through the development of wind related manufacturing and constructions jobs and the supply of electricity from Offshore Wind Farms on the outer continental shelf; and

Whereas, Legislation (Offshore Wind Economic Development Act or OWEDA) passed in 2010 and provided for tax incentives and mechanics for Offshore Wind cost recovery, pending approval of regulations by NJ Board of Public Utilities (BPU). Financing the construction of OSW projects will include cost recovery from electric customers thereby increasing electric rates, the amount of which for this project is less than $1 per year per residential ratepayer: and

Whereas, Significant state and federal regulatory approvals have been in hand since 2011, including New Jersey Department of Environmental Protection and Army Corps of Engineers permits but excluding the approval of a cost recovery mechanism by the New Jersey Board of Public Utilities, where approval of Fishermen's Atlantic City Wind Farm has been pending since May of 2011 although final hearings were conducted in December of 2013, and

Whereas, Fishermen's was awarded a $4 million US DOE advanced technology grant in December of 2012 and is one of six finalists for three DOE grants to be awarded in May of 2014;

The Board of Directors of the Greater Atlantic City Chamber finds as follows:

- Job creation-Fisherman's project would create 216 direct marine construction jobs and a minimum of 12 ongoing positions for operation and maintenance of the facilities;
- Development of Offshore Wind manufacturing industry based in South Jersey could provide additional jobs and indirect economic benefits for the region;
- Wind power has relatively little environmental impact compared to other generating sources;
- On a per kilowatt-hour basis, wind power (like all generation) is more expensive than natural gas fired generation, which sets the price for electricity in the regional wholesale market.
- Wind power is intermittent compared with base load power plants thus requiring generating sources as backup.

Now, therefore, be it Resolved by the Greater Atlantic City Chamber, this 20th day of February, 2014, that

1. The Greater Atlantic City Chamber supports the Fishermen's Atlantic City Wind Farm.
2. The NJBPU should render a decision on the project.
3. Any decision should reflect the long term aspects of providing electricity while recognizing any impacts to Chamber members and area residents.
4. A demonstration project approach for Offshore Wind provides a reasonable method to evaluate Offshore Wind technology.

County of Atlantic, New Jersey

Resolution No.: 116

Approved as to Form and Legality

Roger C. Steedle, Legislative Counsel

Submitted By:

Colin G. Bell
Freeholder Sponsor

RESOLUTION URGING THE NEW JERSEY BOARD OF PUBLIC UTILITIES TO APPROVE THE FISHERMEN'S ENERGY ATLANTIC CITY WINDFARM PROJECT

WHEREAS, the creation of new, well-paying jobs is vital to the economic success of Atlantic County; and

WHEREAS, wind-energy is a growing sector of the economy that provides construction, manufacturing, and professional employment opportunities; and

WHEREAS, Fishermen's Energy is a New Jersey developer of offshore wind-energy facilities in the Northeast and Mid-Atlantic; and

WHEREAS, in 2009 Fishermen's Energy was awarded one of the first five exploratory wind offshore leases issued by the federal government; and

WHEREAS, Fishermen's Energy wishes to develop a five turbine wind-energy facility off the coast of Atlantic City; and

WHEREAS, Fishermen's Energy has secured permits from the New Jersey Department of Environmental Protection, New Jersey Green Acres, New Jersey Tidelands, and the Army Corps of Engineers for construction of the facility; and

I, Sonya G. Harris, Clerk of the Board of Chosen Freeholders of the County of Atlantic, State of New Jersey, do hereby certify that the foregoing is a correct and true copy of a resolution adopted by the Board at a meeting duly held on the 25th day of February 2014.

Signed _____
Clerk of the Board

RECORD OF VOTE															
FREEHOLDER	MOVED	SECOND	YES	NO	NV	ABS	AB	FREEHOLDER	MOVED	SECOND	YES	NO	NV	ABS	AB
BELL	✓		✓					PAULS			✓				
BERTINO							✓	RISLEY			✓				
COURSEY		✓	✓					SUTTON							✓
DASE			✓					FORMICA, Chairman			✓				
MARINO			✓												

NV - Not Voting ABS - Abstain AB - Absent

County of Atlantic, New Jersey

Resolution No.: 116

WHEREAS, the project is projected to create at least four hundred direct and indirect construction jobs in the construction phase and 25-30 permanent jobs in the operations and maintenance phase; and

WHEREAS, the project will have additional secondary economic benefits on other segments of the local economy, such as tourism and sea vessel construction and operation; and

WHEREAS, studies have demonstrated that Fishermen's Energy Atlantic City project will have at least a $33.4 million net positive effect on the local economy; and

WHEREAS, the United States Department of Energy awarded the project a $4 Million Advanced Technology Grant in 2012 and the Project is one of six finalists for one of three additional grants each in the amount of $47 million to be awarded in May of 2014; and

WHEREAS, Fishermen's Energy must secure final approval from the New Jersey Board of Public Utilities ("BPU") before construction may begin; and

WHEREAS, the application has been pending before the BPU for over a thousand days, final arguments were conducted in December and the BPU has withheld that approval for over two years; and

WHEREAS, the approval of this project is vitally important to the economic well-being of Atlantic County and will also provide long-term environmental benefits associated with sustainable energy production;

NOW, THEREFORE, BE IT RESOLVED, by the Board of Chosen Freeholders of the County of Atlantic that the Board strongly supports the Fishermen's Energy Atlantic City project; and

BE IT FURTHR RESOLVED that the Board of Chosen Freeholders of the County of Atlantic that the Board urges the New Jersey Board of Public Utilities to issue the requisite approvals to this project as quickly as possible; and

BE IT FURTHER RESOLVED that the Clerk of the Board of Chosen Freeholders shall transmit a duly authenticated copy of this resolution to each member of the Board of Public Utilities, the New Jersey Division of Rate Counsel, the Governor of the State of New Jersey, and the legislative delegations of the First, Second, Eighth and Nine Legislative Districts.

From: geohay3
Sent: Friday, December 04, 2015 12:24 PM
To: EMPupdate
Cc: Bill
Subject: Draft Energy Master Plan Input

I am an Atlantic Electric and South Jersey Gas rate payer. I also use to work for an major electric and gas utility in areas related to electric and gas resource planning for complimentary gas turbine and renewable as wholesale as well as community scale and decentealized renewable energy/efficiency strategies.

Plan ignores overwhelming public comments at the three public hearings on transitioning to renewables, decentralized power, offshore wind and meeting NJ legislative climate changes goals as well as Federal EPA Clean Power Plan. Plan emphasizes taxing electric and gas rate payers for unneeded reliability upgrades and risky merchant combined cycle power plants that will dramatically increase NJ levels of carbon dioxide when rest of world is seeking to reduce it. The potential for major stranded assets is great for rate payers, whether due to Federal regulatory requiremenrs on greenhouse gas and/or rapidly improving and decreasing costs of decentralized community scale energy options in near and longer term.

EMP is corpotate welfare for electric and gas interests and for that matter lawyers, lobbyist, political campaign fund raising, and baised appointees from industry planning their next poltical or business careers when Christie leaves office.

The lack of NJ regulatory policing of regulated and unrelated sides of utilities, and collaboration of NJ gas utilities unregulated interests in fracked gas and PennEast Pipeline from PA and subsidizing thru rate payers pipeline by regulated gas utilities in NJ is appalling. The fact the pipelines and wire upgrades for "reliability" propaganda will cause major environment damage to Pinelands, open space and local.communities as well as increasing greenhouse gas levels in NJ is also appalling.

Plan needs at least a year long process for major revision and reflect current realities, versus circumstances in 2011.

There is a crisis on levels of greenhouse gas and action needed now to have impact over the longer term. NJ EMP will just make matters worse on climate change, at expense of NJ electric and gas rate payers.

George Hay
Somers Pt NJ

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Secretary Asbury
Board of Public Utilities
9th Floor
PO Box 350 S. Clinton Ave
Trenton, NJ 08625

December 4th, 2015

Dear Secretary Asbury,

RE: Renewable Energy Systems Comments on Draft New Jersey 2011 Energy Master Plan Update

As one of the top renewable energy companies in the world, Renewable Energy Systems (RES) has been providing services in development, engineering, construction, and operations since 1982. RES has developed and/or built over 10 GW of renewable energy capacity worldwide, has an asset management portfolio exceeding 1 GW, and is active in a range of energy technologies including onshore and offshore wind, solar, energy storage, transmission, and demand side management (DSM).

Since 1997, RES has been active in the Americas and has over 8,000 MW of utility-scale renewable energy and energy storage projects and constructed more than 650 miles of transmissions lines throughout the U.S., Canada, and Chile. Continuing to provide innovative solutions for our clients, we are a leader in the energy storage market having developed and constructed 77.5 MW (47.6MWh). While RES has constructed transmission lines for other projects, in 2013 we built an independent 214-mile/230kV transmission line.

Our in-house development, engineering, construction, and O&M expertise enables us to offer our clients a full suite of development and construction services. This ensures that projects are engineered for maximum efficiency and that they transition smoothly from one phase to the next.

The company employs more than 500 full-time professionals and RES' U.S. corporate office is located in Broomfield, CO with regional offices located in Austin, TX, Minneapolis, MN, Old Saybrook, CT, and San Francisco, CA. For more information, visit www.res-americas.com.

Through RES Offshore, based out of Kings Langley, Hertfordshire, UK, RES has been active in offshore wind for over 15 years. The offshore team is a multi-disciplinary services provider delivering a wide range of services to owners of offshore wind projects, and have worked on over forty offshore wind farms across the world including in the UK, continental Europe, the US and south-east Asia. Our services include:

- Project management and package management,
- Development services (that is, the process of obtaining permits and approvals for a project),
- Feasibility assessment, design, engineering and technical services,

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- Procurement and management of works contracts (including turbine contracts),
- Construction management, and
- Operation and maintenance management, and delivery with technicians.

We have the full range of skills and capabilities needed to manage and deliver an offshore wind farm project for a client. This capability is provided by the range of staff within our team, including specialists in: wind turbines, foundations, cables, electrical systems, grid connections, CAD, GIS, metocean analysis (including energy yield assessments), geotechnical engineering, geophysical surveys, project management, construction management and O&M.

We often form joint project teams to deliver the project with our clients, made up of RES staff and staff from the client. We also develop our own projects in partnership with other investors. For full information visit: www.res-offshore.com

Through RES America Developments Inc., RES has been active in the offshore market in the US for over five years, both as a developer and a provider of services and consultancy. We responded to a number of Bureau of Ocean Energy Management (BOEM) Requests for Information and were deemed as legally, technically and financially eligible to enter lease auctions for Maryland, Massachusetts and New Jersey. In January 2015 RES America Developments Inc. won a federal lease off Massachusetts.

On November 9th 2015 BOEM conducted a federal lease auction for parcels off the coast of New Jersey further advancing the Offshore Renewable Energy Program, the Administration's clean energy goals and the President's comprehensive Climate Action Plan to create American jobs, develop domestic clean energy resources and cut carbon pollution.

RES was announced as the provisional winning bidder of OCS Lease OCS-A 0498, an area of 160,480 acres of seabed with the potential to install up to 1,600 MW of installed wind generation capacity. RES is delighted to have been announced the provisional winner and will execute the Lease following completion of the Department of Justice and BOEM review.

RES entered the auction with the intention to secure a Lease because it believes that New Jersey presents good market conditions for offshore wind, providing state legislative support through the Offshore Wind Economic Development Act (OWEDA) and a federal lease area that has been identified by BOEM as being most suitable for offshore wind projects, in consultation with other state and federal agencies. New Jersey's ground breaking Legislation was signed into law by Governor Christie in 2010, as the first law of its kind, directing the New Jersey Board of Public Utilities (BPU) to implement an offshore wind renewable energy credit (OREC) program as part of a robust clean energy power plan and requiring a percentage of electricity sold in the state to be from offshore wind energy. This percentage would be developed to support at least 1,100 MW of generation from qualified offshore wind projects.

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At that time the Governor emphasised the importance of developing New Jersey's renewable energy resources and industry as critical to the state's manufacturing and technology future, as well as being an environmental leader in the use of its natural renewable energy resources. Such action made New Jersey a champion for offshore wind.

Later in 2011 New Jersey set out its goals in an Energy Master Plan (EMP), a strategic vision for the use, management, and development of electricity in New Jersey over the next decade. The EMP goal for offshore wind energy said the state will "examine the viability of developing offshore wind generation subsidized by the Offshore Wind Renewable Energy Certificate (OREC) program." OREC provides an application process and a framework under which the BPU will review any application. The rules were amended in 2013, and the BPU said it is working on further refinements to the rules.

RES welcomes this new opportunity to provide comment on the update to the 2011 New Jersey Energy Master Plan published on November 20th 2015 by the BPU and the New Jersey Department of Environmental Protection. We note that the updated report sets out to measure the progress made toward meeting the goals set in the 2011 EMP and makes recommendations for building on that progress, including reference to the goals for offshore wind energy, first set out in the 2011 EMP. RES is also pleased to note that in August 2015 BPU stated its intention to hire an outside consultant to advise on offshore wind development. The expert would consult on state regulation needed for offshore wind development to define the financing mechanism through which utility customers would fund the projects. We believe this indicates that the Administration is keen to finalize and implement the process it had initiated under the Legislation.

However, in the 2015 update to the 2011 Plan BPU has made a number of comments relating to offshore wind that we believe misrepresent the successful development and deployment of this technology in Europe. For example, on page 29 the EMP states, "The rigors of the offshore environment and the associated technological challenges for construction, operation, and maintenance, put upward pressure on the costs of any offshore wind project." This does not reflect the current status of the European offshore wind industry, where recent auctions have shown projects costs to have fallen significantly over the last 5 years.

In the UK, the Department of Energy and Climate Change ("DECC") announced the winners of the first contract for difference ("CFD") allocation round on February 26 2015. Two offshore wind farms obtained a contract for difference with a strike price of 119.89 GBP/MWh for the East Anglia 714 MW project (delivery date 2017/18) and 114.39 GBP/MWh for the Neart na Gaoithe 448 MW project (delivery date 2018/19). This represents a decrease of 36% compared to 2010.

In Denmark, the winner of the latest Danish tender, Horns Rev III, was published in February 2015. The offshore wind farm will have a capacity of 400 MW and the winning price was 770 DKK/MWh for 20 TWh, down 32% since 2010. The park is located 20-30 km from shore, the closest harbors being 25 km and 55 km from shore and set to begin operation in 2017. The Danish Energy Agency concluded that the main reason for the low price on the

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park is "a lasting decline in costs due to cheaper technology, higher degree of specialisation, and technological progress that allows higher capacity factors."

On page 30 the EMP states "While Europe's plans for offshore wind development are ambitious, as we entered 2014, plans for global offshore wind development were being curtailed. In July 2014, Bloomberg News reported that Europe has scrapped plans for more than 5,700 MW of offshore wind projects since November 2013."

This is a misrepresentation of the data from Europe; over the last 10 years, commissioned offshore wind capacity has increased rapidly to reach just above 8,000 MW by the end of 2014. In the first six months of 2015 alone, a further 2,300 MW has been connected to the European grids.

The EMP also notes that construction, operation, and maintenance of an offshore wind project at this point would be too costly due to technological challenges and that "While the future may bring change, offshore wind in the U.S. is not economically viable at this time." It then concluded that "Although offshore wind projects have not yet proven economically feasible in New Jersey, BPU remains interested in examining the potential for offshore wind projects to become part of the State's energy portfolio, provided that the projects are economically viable and that New Jersey ratepayers and businesses are protected."

As a world leading renewable energy company and an experienced offshore developer in Europe, RES is committed to continuing to drive down the costs of energy from offshore wind and the European market has demonstrated that under a stable policy and legislative regime that provides for the deployment of offshore wind at scale and volume, costs can be significantly reduced, with increased benefits of national, regional and local economic growth and job creation within a low carbon economy.

RES believes that the development of offshore wind projects off New Jersey is commercially viable at utility scale. Through OWEDA the NJ Administration has already recognised that offshore wind is a valuable natural resource. We therefore urge BPU to continue its work towards completing the OREC process and we would welcome the opportunity, as a (provisional) OCS Leaseholder, to work with you to further discuss this exciting opportunity. Working together we can demonstrate that we can deliver commercial scale offshore wind projects that deliver the goals first set out in the 2011 EMP, making a significant contribution to New Jersey's Renewable Portfolio Standard (RPS), reducing the costs of energy to all consumers, providing net economic benefits, while delivering clean energy with zero emissions.

We look forward to working with you.
Regards,

Brian Evans
Chief Development Officer

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