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From: Shubhendu Singh <shubhendu_singh18@yahoo.com>
Sent: Friday, November 15, 2019 1:20 PM
To: comments, EMP
Subject: [EXTERNAL] IEP Feedback

New Jersey can and should be a global leader in addressing our climate emergency. Instead, the findings presented in the Integrated Energy Plan (IEP) fall far short of what we need to do to address the climate crisis. I consider it imperative that you take additional steps through the IEP modeling and analysis to address the critical deficiencies in the IEP before finalizing the IEP and the Energy Master Plan.

NJBPU has given 15 days for the public to comment on the IEP starting from November 1 and ending on November 15. Such a short comment period on modeling that can threaten to shape NJ next 30 years regarding Energy doesn't make sense. RMI provided the webinar video recording availability notice on November 6 at 3:52pm (cteplin@rmi.org). In effect, the public (stakeholders) were allotted 8 days to assess this and provide feedback to NJBPU. For a 30-year program, this is wrong.

Though quite a bit has been accomplished this year, it is all based on existing energy services knowledge (which is NJBPU's mandate) and doesn't take into consideration the energy revolution starting around the world. This revolution is continually evolving. Why should NJBPU lock into something based on old technologies and standards when NJBPU could monitor and adapt as the clarity of energy options quickly opens up over the next 2 years?

RMI did not present what is occurring around the world with countries, states and companies pursuing hydrogen as the key ingredient for creating a clean energy infrastructure and reducing CO₂ emissions. Nine countries and California are actively rolling hydrogen solutions now for vehicles, replacement for natural gas in heating buildings and many other aspects (even including using hydrogen as the battery in smart grid design). RMI's explanation on the call that hydrogen is not cost effective doesn't match what is occurring in industry, countries, The International Energy Agency (IEA) and actual conversions to hydrogen that are currently underway in 1. Australia, 2. Canada, 3. China, 4. France, 5. Germany, 6. Japan, 7. Norway, 8. South Korea, 9. United Kingdom and 10. California (see latest updates sourced from [10 Countries Moving Toward a Green Hydrogen Economy](#)).



10 Countries Moving Toward a Green Hydrogen

Economy

It's early days for renewable hydrogen, but the potential is enormous, and several nations have an eye on the dr...

Both China and California have Fuel-Cell electric vehicles (FCEV) on the road now and both have established targets of 1,000,000 FCEVs on the road by 2030 and 1,000 hydrogen gas stations by 2030. Other updates from countries such as Japan and South Korea are fast tracking hydrogen gas stations and vehicles **by 2020** since Japan and South Korea are the leading automotive manufacturers of hydrogen vehicles being sold around the world.

One influential person stated that CA has moved to hydrogen because of over renewable gathering deployment (solar and wind). I am fearful that you are being informed of this as well. **This is not true.** They are using natural gas to generate hydrogen in the short term and building out solar and wind generated hydrogen. ***Please discourage this being the excuse that NJ agencies use as to why they should ignore the rapid rollout of hydrogen other countries and CA.***

The IEP presented on November 1, 2019, doesn't reflect recent studies, and it is not consistent with how other countries and states are reducing CO₂ emissions and approaching clean energy. ***Please do not use the RMI IEP to guide the EMP since the scenarios are flawed and do not leverage what the rest of the world is pursuing.***

I realize that NJBPU is under pressure to show that they are done with the EMP and now the IEP, but this is a 30-year project. They need support to know that they can take several years to get the planning for the right mix of energies and conversion to enable New Jersey to be 100% converted to clean energy (as specified in the EO28). Using RMI castigates NJ residents over the long term with higher costs and solutions that are not consistent with the rest of the world.

NJBPU should take time and prepare accurate modeling, based on current information relevant in NJ that addresses:

- potential impact of future regulatory and technological changes
- mechanisms or recommendations of how to decrease fossil fuel use
- modeling scenarios that cut NJ's emissions 45% before 2030 as recommended by IPCC 2018 report
- modeling for the scenario that delivers a goal of carbon-free energy for New Jersey (not "carbon-neutral", which includes dirty and inefficient energy)
- front load emission reductions to have the most significant impact on our climate emergency
- accurately estimating the global warming potential of short-lived climate pollutants like methane and black carbon (using a 20 year or 10 year time frame); and then running scenarios based on this

- counting social costs of the continued reliance and use of fossil fuels; modeling for these costs in the cost analysis without allowing real costs to be dumped on the public and particularly on our most burdened communities who already bear them disproportionately

Of note – the NJBPU has not demonstrated serious consideration of hydrogen as a fuel source, and they should.

- Since Nikola is building fuel-cell trucks to be deployed in 2020, why not partner with Nikola to enable NJ to be a main thoroughfare for their trucks?
- Since California is leading the hydrogen conversion in the US, why not partner with CA to learn from their mistakes and achievements? Why not leverage their knowledge?
- Since Hypersolar is looking for partners to build their solar hydrogen generation plant, why not encourage them to deploy in New Jersey?

There are so many opportunities for working with other states, companies, IEA and other countries for New Jersey to come up to speed.

Please consider the following request for action:

1. **Create an Energy Master Plan Transformation Program (EMPTP) Office** that would directly report to Governor Murphy.
2. **Cancel target for the IEP to be completed by December 2019.** This is not realistic, uses bad information, and completely ignores what is taking place in other countries and California. Rather:
 - a. Have NJBPU and other Agencies involved spend 2020 through 2025 developing the Integrated Energy Plan as a project track in the EMPTP.
 - b. Encourage NJBPU to initially target obvious quick wins from now until 2025 (building efficiency, deployment of more solar/wind and for utilities to provide infrastructure readiness for locally gathered and distributed renewable energy enabled grid design)
3. **Make the IEP project track 1 of the EMPTP and for NJ Agencies to complete it by 2025.** Encourage NJBPU and other Agencies involved to take the time to get up to speed on realistic and current Integrated Energy Planning.

I greatly appreciate the work NJBPU has taken on the EMP and for all of its oversight on current energy demand. Please do not write off the future from premature data and analysis simply to issue a Final EMP. This is a substantial long-term change for New Jersey, and we need to take the time to figure out the best plan that helps New Jersey change.

New Jersey Agencies should be given time since this EMP is going to take place and last the 30 years. **Please take the time to do this right.** Short answers today will not reflect cost effective clean energy solutions even 5 years from now and in fact will curtail our ability to adopt better answers even in the next 2 years. We don't need the wrong answer today or this year.

Thank you for the opportunity to comment on the IEP. I am counting on NJBPU to listen to all input, including all comments submitted on the Draft EMP, and run additional scenarios to successfully combat the growing climate emergency here in NJ.

Respectfully submitted,
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