

EmpowerNJ Comments on NJDEP 9/3/2020 PACT Virtual Stakeholder Meeting

EmpowerNJ appreciates the opportunity to provide feedback on the subjects discussed at the DEP's PACT stakeholder meeting on 9/3/20.

After completing most of these comments, we have learned from subsequent conversations with DEP staff that it is relying on 1) the delayed release of the GWRA report, currently scheduled for next month and 2) follow-up communiqués, hopefully by the end of October, connecting all the disparate pieces together including real benchmarks and timelines for reductions, to demonstrate progress we didn't witness from the 9/3 meeting. Even after discounting for (and in part because of) the understandable delays due to COVID, given the overlapping pandemic, racial, climate and economic crises, we continue to be extremely alarmed by what seems to be a lack of concern, or urgency to meet or even an acknowledgement of the most pressing targets set by the international scientific community (45% reduction in climate emissions by 2030) to avert the worst aspects of the ongoing and still coming climate disaster.

EmpowerNJ's comments are provided below in two sections. The first section summarizes EmpowerNJ's comments on the NJDEP's first PACT stakeholder session on 2/25/20 and provides status on NJDEP's actions on those comments based on what we heard on 9/3/20. EmpowerNJ's full set of comments on the 2/25 session have been provided as an attachment to the same email that transmitted this document. The second section provides comments on the content of the 9/3 meeting.

Status of EmpowerNJ Comments on 2/25/20 meeting.

Comment	Status as of 9/3/20
DEP's rules must reduce methane as quickly as possible.	No progress
Black carbon must be regulated.	No progress
DEP must fast track the implementation of GHG rules and regulations.	Current pace is too slow
The final regulations must be in place by the end of the Governor's first term.	Unclear
DEP's rules on new fossil fuel infrastructure must consider the long-term costs of carbon and pollution.	No progress
DEP's rules must consider the cost of stranded assets.	No progress
DEP should not rely on sequestration as a strategy for reducing CO2.	No progress
DEP should support municipal efforts to reduce CO2.	No progress
NJ must also have an incentive program to get commercial and residential users to convert to ground source heat pumps.	No progress
Reducing power demand (improve efficiency) must be a key focus.	No progress
DEP must use its ability to regulate ozone and NOx credits to reduce CO2 emissions and production of ground level ozone.	No progress

DEP has to regulate CO2 much more comprehensively than just sources from facilities it already regulates and/or document where more drastic cuts elsewhere will offset them enough to reduce GHGs 45% by 2030.	No progress
DEP must conduct cumulative impacts assessments	No progress

Given that there has been virtually no progress on every issue in EmpowerNJ's comments on the 2/25 meeting, based on what we heard on 9/3/20, we are attaching those comments again as applying to the 9/3 presentations.

Comments on 9/3/20 EGU Presentation

The contents of the 9/3 presentation are not encouraging in terms of the pace, breadth and depth of the DEP's regulation development process. It has been six months since the first PACT session in February and the only suggestion for EGUs is a single solution to address CO2 by reducing lb/MW-hour limits on existing gas plants. There should be many solutions on the table for discussion and each should have copious amounts of data (including volumes of GHGs and financial costs and savings) associated with them that can educate and enable solid analysis on the part of stakeholders.

Other solutions for reducing GHGs from EGUs, such as hybrid microgrids to replace new gas plants and high capacity storage solutions to replace peaker plants are not being considered. NJDEP should provide a segmented view of the different types of EGUs and multiple solutions for each portion of the EGU industry. One size does not fit all. There is no way to know if the lb/MW-hour strategy is better or worse than any other EGU approach.

A major shortcoming of this and every other similar proposal presented in a vacuum, is that it is not presented against any view of total GHG reduction programs (in the energy sector and beyond) and the role of EGU CO2 reductions in this bigger picture. Stakeholders are unable to assess the contribution of this approach or its effectiveness versus any other approaches. This data must be provided with any proposal and must be modeled for the next 30 years.

For example, a robust set of solutions for the entire EGU sector would include a combination of strategies to reduce user demand for energy overall (including improved energy efficiency), increased demand for renewables such as energy aggregation and increased use of renewable based microgrids (residential and commercial). Each solution should have costs and benefits and be evaluated on a comparable scale such as cost per unit of GHG reduced. Only in this manner is NJ going to evolve to the optimum set of programs that produce the most bang for the buck.

There was no indication of the potential or planned total GHG reductions that would be produced from the presented approach on an annual basis. In addition to other metrics NJDEP must look at the change in tons/year of GHGs.

The addition of new renewable energy associated with specific EGU's, or in general, does not guarantee that there will be a corresponding reduction in GHGs in PJM territory let alone in NJ. There must be a clear linkage between the addition of this new renewable energy and reductions in GHGs. It is also important to provide a plan by which accurate measurements will be taken to ensure this approach produces the desired results.

A limit of 860 lb/MW-hour was proposed and attendees were asked if this was satisfactory. There was no accompanying information that would enable one to determine its effect on GHGs vs. any other limit.

This strategy must also include an annual or bi-annual (two-year) indication of the tighter limits that would be set each period on allowed GHG emissions to provide the EGU industry with guidance and demonstrate how quickly this approach will reduce GHGs over time.

Therefore, the strategy to limit lb/MW-hour emissions and allow EGU's to include clean renewable energy generation in the computation of lb/MW-hour may be a positive step in this effort to reduce GHGs but there is no reason to assume this without further proof, and no substantive conclusions can be drawn from the information provide by DEP.

If this approach is implemented, only Class I renewable energy sources (excluding methane gas or biomass) should be allowed to be included in this approach. NJDEP definition of Class I renewables is:

Class I renewable energy- electric energy produced from solar technologies, photovoltaic technologies, wind energy, fuel cells, geothermal technologies, wave or tidal action, and methane gas from landfills or a biomass facility, provided that the biomass is cultivated and harvested in a sustainable manner.

The DEP proposed plan does not prevent building new gas power plants such as the NJ TRANSIT project. A moratorium on all new fossil fuel projects until regulations are in place to ensure NJ can meet its GHG targets, would address this in one stroke. Until such an approach is implemented, any developer is free to build new gas plants (within current DEP regulations). Therefore, while the DEP is considering the first few small steps to reduce GHGs, new plants could be built that could emit more than the DEP reduced. Consider the volume of GHG to be a hole to be filled. The first rule when trying to fill a hole is to stop digging.

Another effective approach to preventing new projects, which was included in our comments from 2/25 would be to eliminate the ability to purchase ozone or NOx credits. Without this, new plants will not meet existing air quality permit limits. We would appreciate receiving an analysis as to the feasibility of using this approach that appears to have been ignored by DEP.

NJDEP's focus on stack emissions blinds NJDEP planers to the importance of

reducing methane, which is 86 times more potent as a GHG than CO₂. NJDEP needs to combine its vertical approach to emission sources (looking at each source independently) with a horizontal approach that looks at emissions of each type to create the most cost effective total strategy for reducing GHGs. For example, reducing one molecule of methane is equivalent to reducing 86 molecules of CO₂. If it costs \$1 to reduce a molecule of CO₂, it is more cost effective to spend up to \$85 to reduce one molecule of methane than to reduce one molecule of CO₂.

While methane emissions from any individual EGU stack may be relatively small, methane leaks at every stage of its lifecycle and its total contribution to climate change GHGs is very large (see below). In addition, the moron in the White House is reducing/eliminating methane leakage rules and making this problem worse. NJDEP must address the total methane problem. If NJDEP is ignoring methane emissions, which entity is addressing this?

The statement was made during the session that methane represents less than 1% of emissions on a CO₂e basis. We would like to see the data behind this statement. Is it using the 100-year value for methane GWP or the 20-year value or is it based on volume only? Is it only looking at stack emissions or is it considering life cycle emissions?

On a global basis we can see the following:

In 2017 (last year for which data for methane and CO₂ is available):

- Global methane emissions = 0.6 gigatonnes
- Methane emissions (in terms of CO₂e) = 0.6 x 86 = 51.6 gigatonnes
- Global CO₂ emissions = 36.2 gigatonnes
- Methane emissions were 140% greater than CO₂ (methane CO₂e / CO₂ = 51.6 / 36.2 = 140%)

The proposal to control CO₂ by reducing lb/MW-hour contributes to other targets set by the EMP such as **32 GW of in-state solar, 11 GW of offshore wind, and 9 GW of storage**, but there is no information on how much it will contribute to these objectives. Is there a BPU master plan demonstrating a path to achieving these objectives which DEP can use to demonstrate how its proposals fit in?

NJDEP and BPU continue to violate NJ law by not reworking the EMP and IEP GHG estimates using the 20-year lifetime rule for methane CO₂e emissions. Not only is this illegal but it is impossible for DEP and BPU to make effective plans to reduce GHGs when they do not know today's GHG emissions in terms of CO₂e. Furthermore, DEP and BPU have no ability to forecast emissions since they don't know what they are today and are using an incorrect factor for methane global warming power.

Mitigation was mentioned as a tool for reducing GHGs. This is a dangerous tool. Allowing EGU's to trade lb/MW-hour reductions will only result in moving the pollution from one source to another.

DEP must regulate CO2 much more comprehensively than just sources from facilities it already regulates and/or document where more drastic cuts elsewhere will offset them enough to reduce GHGs 45% by 2030. This would include all stationary and mobile sources as well as fugitive emissions including intrastate pipelines and sections of interstate pipelines located within NJ, compressor stations, waste management / treatment facilities, transportation, shipping, etc.