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Catherine R. McCabe Commissioner New Jersey Department of Environmental Protection 401 East State Street P.O. Box 402 Trenton, NJ 08625-0420

March 10, 2020

Re: <u>Department of Environmental Protection 2<sup>nd</sup> GHG Stakeholder Session</u>

Dear Commissioner Catherine McCabe,

Recently, the DEP hosted a stakeholder session concerning regulating greenhouse gas emissions in New Jersey. The dialogue there was positive, and as the DEP looks at reducing carbon emissions in New Jersey, the Sierra Club would like to raise some issues and comments. Chiefly, we are concerned that the strategies discussed are too narrow in scope—in terms both of the pollutants considered and of the emissions reductions contemplated, as discussed in more detail below. We likewise have serious concerns about the timeline DEP discussed, because even the short-term strategies will take 2-3 years to implement. It is crucial to have a more aggressive timeline when it comes to regulating and reducing greenhouse gases, and in achieving public health improvements due to co-pollutant reductions.

#### **Comments**

Substantive Aspects of DEP's Proposal

One of our biggest concerns is that DEP is apparently only planning to regulate greenhouse gases to the extent that DEP believes it has "clear authority," to regulate—meaning just where DEP is already regulating those greenhouse gases. DEP is currently only regulating CO<sub>2</sub>, and as a result, the Sierra Club worries that DEP may limit itself to CO<sub>2</sub> emission reductions. Carbon dioxide is not the only greenhouse gas, and focusing on it to the exclusion of other potent climate-altering pollutants will hamper New Jersey's efforts to address climate change. As you are well aware, under the Air Pollution Control Act, New Jersey has clear authority to regulate any and all air pollutants, and that authority has been confirmed in regulation. This means that DEP can regulate methane, black carbon, and other short-lived pollutants in addition to CO<sub>2</sub>. Black carbon found in the soot from diesel vehicles is a pervasive

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<sup>&</sup>lt;sup>1</sup> See N.J.S.A. 26:2C-8 (granting DEP power to "prevent[], control[], and prohibit[] air pollution throughout the state"); see also Revisions to N.J.A.C. 7:27-8, DEP Docket No. 21-04-09/476 (Nov. 21, 2005) (citing N.J.S.A. 26:2C-8 as authority for revisions to New Jersey Administrative Code to add regulation of greenhouse gases).



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problem in urban areas, and smog formation from methane pollution increases asthma attacks in our cities.

Particularly given the prevalence of gas-fired generation in PJM, regulation of methane and other greenhouse gases in addition to CO<sub>2</sub> is critical. The Sierra Club therefore recommends that DEP incorporate limits on methane and black carbon emissions into its greenhouse gas regulation process.

Second, the Sierra Club is concerned that DEP appears to be basing CO<sub>2</sub> reductions on the Regional Greenhouse Gas Initiative (RGGI) reductions, rather than going further, as the climate crisis and New Jersey's own goals necessitate. DEP has admitted that this will not allow New Jersey to meet the NJ-PACT goals of 80% reductions in greenhouse gas emissions statewide. Nor would RGGI alone reach the 45% reduction by 2030 recommended by the 2018 Intergovernmental Panel on Climate Change (IPCC) report. Accordingly, DEP needs to look at a more protective set of emissions reductions than those prescribed by RGGI.

This is particularly true given that DEP appears to contemplate approaching the problem separately for Electrical Generating Units (EGUs) and Non-EGUs, as well as separating out short-term from long-term strategies. The Sierra Club is concerned that as a result, DEP may not reach the NJ-PACT goals in the EGU and Non-EGU sectors, nor achieve sufficient greenhouse gas emissions reductions from a purely environmental perspective. More stringent greenhouse gas emissions reductions from EGUs are necessary, but they are not enough. DEP must look for reductions in other sectors in order to reach 80% greenhouse gas reductions across the state.

Third, the Sierra Club is concerned about the proper structuring of emission rate regulations for EGUs. Although at the stakeholder session DEP discussed emission limitations in terms of pounds of CO<sub>2</sub> per megawatt-hour (lbs/MW-hr), Sierra Club is concerned that ultimate regulations may be in terms of pounds per million British thermal unit (lbs/MMbtu). While MMbtu measures the heat output of thermal EGUs, MW-hr measures the actual electricity generated, making it a much more accurate metric able to more readily compare across different types of EGU.<sup>2</sup> Conversely, using a limit in terms of lbs/mmBTU would allow many inefficient and higher-polluting plants, like single-cycle natural gas plants that pollute more, to stay online by masking significant differences in electricity generation per unit of climate pollution.

Fourth, we are very concerned with the level of emission standards that DEP is contemplating. The Sierra Club understands that, in DEP's current contemplation, emission standards for new projects would be set based on CO<sub>2</sub> levels from a plant such as the Sewaren 7 Plant in Woodbridge, New Jersey. However, this is an inappropriate standard for *new* generation, and should only be applicable to existing generation. For new plants, New Jersey should set

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<sup>&</sup>lt;sup>2</sup> Moreover, consumers care about the *electricity* generated by a plant, not its heat output.



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emission limits consistent with the best available technology to reduce carbon for new projects, like Best Available Control Technology (BACT) and Lowest Achievable Emissions Rate (LAER).

Finally, it is of absolutely critical importance that DEP not structure its program in such a way that pollution is increased in overburdened communities. At the stakeholder meeting, it was mentioned that DEP might look at some type of allowance program similar to the current program in Massachusetts for any reductions similar to or below RGGI or the standards of Sewaren 7. We have serious concerns with using an allowance system, especially because this could increase pollution in communities already suffering from disproportionate levels of conventional air pollutants. Accordingly, we were glad that DEP staff at the meeting agreed with us on this priority. However, it is likewise important that we go beyond merely avoiding creation of pollution "hot spots" to actually target reductions for CO<sub>2</sub> and co-pollutants in those communities.

Consistent with the above, the Sierra Club believes that a good partial approach would be to set a series of ratcheting CO<sub>2</sub> emission limits for the EGU sector in terms of lbs/MW-hr, with the goal in mind of achieving reductions necessary to meet the 2030 and 2050 goals identified by the IPCC and NJ-PACT. Such a set of emissions limits could take the form of the following:

All electric generating units in New Jersey that require Title V operating permits shall not emit carbon dioxide at a rate exceeding the following schedule:

By 2023: 3,000 lbs/MW-hr By 2025: 2,000 lbs/MW-hr By 2027: 1,200 lbs/MW-hr By 2030: 1,000 lbs/MW-hr By 2035: 800 lbs/MW-hr

While such reductions would not be by themselves adequate for statewide goals, they would help ensure that New Jersey's electricity sector transitions to clean, renewable generation and that other sectors are better positioned to themselves make further reductions in greenhouse gas emissions. But they should be coupled with reductions in non-CO<sub>2</sub> greenhouse gases, as well as non-tailpipe sources of climate pollution. The current system only considers stack emissions for EGUs and Non-EGUs. It is important that DEP also considers lifecycle emissions, from the wellhead to transportation into New Jersey, as well as fugitive emissions from stationary sources and pipelines leaks, as these are some of the most significant sources of methane pollution. DEP could reduce fugitive emissions by requiring the fixing of leaks and increasing efficiencies. Real



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reductions will not be possible without looking at lifecycle and fugitive emissions as well as stack emissions.<sup>3</sup>

#### Procedural Implementation

Given the scope of the problem to be addressed, the Sierra Club is also concerned with the relatively slow process DEP is considering. For example, the Club is concerned that DEP will not begin to set standards in Title V Air Pollution Permits for greenhouse gas-emitting facilities until after the modeling is completed and CO<sub>2</sub> rules are proposed. We are in the middle of a climate emergency, and it is critical that standards are set as soon as possible. The DEP has the authority to set standards for greenhouse gases, including methane and black carbon, now. Setting these standards after modeling is complete will only delay New Jersey's progress when it comes to greenhouse gas reductions.

As we understand it, DEP's timeline for these strategies is the same as Governor Murphy's Executive Order 100 and NJ-PACT. This is concerning because fossil fuel projects will continue to move forward as the DEP goes through stakeholder meetings and works on setting standards and implementing CO<sub>2</sub> reduction strategies. We are especially concerned that the DEP may not be able to stop new power plants being built in New Jersey if they will ship power out of the state. Every new megawatt of fossil generation built in New Jersey will only make it harder for the state to achieve its greenhouse gas emission reduction goals.

Sierra Club likewise finds it extremely troubling that modeling protocols for methane and black carbon will not be considered until after the Global Warming Response Act Update Report comes out in July. This puts an added delay on methane modeling and regulations, because it will take an additional three years for regulations to be put in place after the modeling protocols are decided. We cannot afford to wait those three years for these regulations. Such delay would put us well beyond the Governor's current term and into a time where we will potentially have a different administration with different goals and priorities.

As DEP currently contemplates, even the short-term strategies will take at least 2-3 years to implement, and the long-term strategies will not start being developed until 2025 and will not be implemented until 2030. This includes the changeover to heat pumps, electric boilers, changing building codes, and other ways to move the housing sector away from fossil fuels. New Jersey cannot afford to wait that long. Instead of waiting for renewable energy to come online

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<sup>&</sup>lt;sup>3</sup> Costs to ratepayers and businesses are currently planned to be balanced as part of the inputs. Instead of only looking at the cost-effectiveness of "sustainable solutions," we urge the DEP to consider the overall cost and pricing of carbon. It is impossible to truly analyze cost effectiveness without looking at the overall cost and pricing of carbon, as well as benefits that flow from co-pollutant reductions. Transitioning from fossil power to clean renewables confers greater benefits than just carbon reductions, as reductions in NOx, particulate matter, and other pollutants translates to better ambient air quality, fewer asthma attacks, respiratory distress, missed days of school and work, and other public health issues, and a healthier, happier, and more productive New Jersey populace.



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from the Energy Master Plan Clean Energy Programs, the DEP should set targets and reductions to get New Jersey down to zero emissions in the EGU (and Non-EGU) sectors. As noted above, DEP already has the authority to do this using the Air Pollution Control Act and limits incorporated into Title V Air Permits to set a schedule to achieve dramatic emissions reductions.

#### **Conclusion**

We are in a climate emergency. The U.N. Climate Report warns of a global tipping point by 2030, so it is absolutely imperative that we reduce greenhouse gas emissions as quickly as we can. We urge the DEP to set an unconditional greenhouse gas reduction goal of 45% by 2030, as recommended by the 2018 IPCC report. The DEP needs to start regulating methane and black carbon now, not just CO<sub>2</sub>.

There are currently 15 new fossil fuel projects in New Jersey whose additional pollution is projected to increase the state's greenhouse gas emissions by 32%. Given the two-year timeline of Governor Murphy's Executive Order 100, we need a moratorium on all new fossil fuel projects until we have a program in place to reduce our greenhouse gas emissions and reach 100% renewable by 2035 and net-zero carbon by 2050.

If you have any questions, or if there is any additional information I can provide, please feel free to call me at (609) 558-9100.

Sincerely,

Jeff Tittel

Director of the New Jersey Sierra Club