House Energy and Natural Resources Committee Chairman Nino Vitale Opponent Testimony on Substitute House Bill 6 Testimony of Rory Gopaul Director at Carbon Solutions Group

May 22, 2019

Chair Vitale, Vice Chair Kick, Ranking Member Denson, and Members of the House Energy and Natural Resources Committee, my name is Rory Gopaul, I am a Director at Carbon Solutions Group, thank you for the opportunity to speak to you today as an opponent to Ohio Substitute House Bill 6.

CSG does not believe that material changes have been made to HB6 and we continue to sit in opposition to it for that reason.

By way of summary in advance I'd like to make just three points today

- 1) Renewable standards must be market based mechanisms. This is the only way to ensure completion and henceforth cost effectiveness. For this reason I oppose the bill.
- 2) Renewables standards must have some component that incentivizes distributed generation. (net metering enables but does not necessarily incent) For this reason I oppose the bill.
- 3) Nuclear power is a legitimate reduction of baseload CO2 emissions. This has been debated, but as a renewables advocate for nearly 20 years it's the conclusion I've come to. For this reason; I constructively oppose the bill in its current form.

As I mentioned, I'm with Carbon Solutions Group and have been in the business of finding least cost CO2 reductions since we were founded in 2006.

Carbon Solutions Group is a project developer, but also works with small and medium solar installers and system owners to monetize their Renewable Energy Certificates.

We represent more than 45 Midwestern installers with nearly 2000 operating projects. Totaling more than 50MW of operating capacity. Half of that in Ohio.

In representing this diverse group we've learned the importance of the renewable portfolio standards in driving investment and we learned the importance of market based programs in driving costs to ratepayers down.

Illinois is what I would advise as a cautionary tale as you study the incentiviation of the nuclear plants via the currently proposed method. In 2015 a bill was proposed to provide \$250m/yr in incetnives to Exelon's aging plants. This bill failed.

In 2016 a bill was proposed to provide \$220m/yr incentives to Exlons' plants but also \$220m/yr torenewables. The Clean Energy Jobs Act passed December 2, 2016. It called for ZEC's worth ~\$16/mwh to be issued to nuclear plants and a pool of money to be directed by the Illinois Power Agency and Illinois Commerce Commission to be devoted to wind and solar facilities of various sizes ranging from household to utility scale.

The regulatory proceedings and program design began in January 2017 and 2017 came and went, then 2018 came and went. Now, nearly half way through 2019 we're getting closer to our customers see real dollars for their projects. We expect that this will happen by the end of the year. 3Years. Now we talk a lot about market based mechanisms versus government administered programs. I think we can all agree the market based is the preferred route. In the Illinois case after 3 years of regulatory proceedings and design we've arrived at the approximate cost per MWh of the first wave of projects to be funded via this mechanism. The final tally will be approximately \$45/MWh or nearly \$10 times the current cost of renewables in PJM and Ohio. They've purchased much less renewable power than their standard calls for and therefore have reduced substantially less CO2 than the law intended. But this is what can happen when market forces are impeded.

In conclusion:

- · We do not oppose the incentivization of baseload low-emission facilities such as nuclear.
- · We support the continued development of distributed generation and the creation of local jobs.
- ·And finally We vehemently support the continued market based mechanisms and the maintenance (or expansion) of the renewables standard.

I appreciate your time and energy on this subject today and I'd be pleased to answer any questions.