PACE Comments on CT DEEP's Proposed GHG Accounting Methodology for the Electric Sector

PACE (People's Action for Clean Energy) is a 501 c (3) nonprofit that works with Connecticut's 169 municipalities to transition to a 100 percent clean and renewable future. The key elements of the 100PercentCT project are:

1. Benchmarking current energy use
2. Reducing consumption of energy through conservation and electrification
3. Sourcing power locally and regionally from renewable sources
4. Creation of a grid architecture that supports the transition to an electric future and
5. Supporting town level projects such as town energy plans, Solarize, HeatSmartCT, and Solar Canopy research to help municipal leaders make local progress in support of state goals.

PACE appreciates the initiative that Connecticut DEEP is taking on improving GHG accounting and is grateful for the opportunity to comment.

General comments:

CT DEEP should continue to produce both accounting views of electricity emissions. Presumably the GHG consumption based GHG calculations proposed will be used to determine whether Connecticut is in compliance with the Global Warming Solutions Act (GWSA). The consumption basis is appropriate in that it reflects CT's contribution to GHG emissions. However, we should also continue to monitor GHG emissions on a production basis since CT has a role in siting and approving fossil fuel plants – and CT residents must deal with the deleterious impact of power plant emissions in the state. This will become more of an issue as the production view of GHG increases beyond the consumption view of GHG.

In addition to improving accuracy of Connecticut GHG reporting CT DEEP should also prioritize consistency in regional (New England) reporting.
While accuracy in accounting for our Connecticut emissions is important, we recognize that Connecticut operates as part of a shared system (ISO New England) which itself is connected to a national grid. So, even as we pursue accuracy at the state level, Connecticut must be cognizant that without coordination double counting will occur. Example: if CT claims more of Millstone's electricity and RECs – then the other 5 New England states should claim less. Thus, we recommend that these proposed accounting changes be shared with the other New England states.

We recommend that CT DEEP develop an allocation to Connecticut municipality based on CT municipal (town, residential, and business) consumption. The creation of a GHG inventory is important in its own right – but in our view should also serve as a prompt for action. Currently, the aggregated number (Connecticut wide) makes no assignment to local areas. Thus – no one is incented to take ownership of their share. It is in our collective interest to empower and enable the municipal sector to help reduce their GHG emissions.

Specific comments:

There were six proposals under discussion in this document: GHG Accounting Proposal for CT Electricity Sector (https://portal.ct.gov/-/media/DEEP/energy/IRP/2020-IRP/Notice-of-Public-Comment-GHG-Accounting.pdf).

We enumerate them and comment on each:

Proposal 1: Credit Connecticut with electricity from RECs retired in Connecticut and count associated non-biogenic emissions against Connecticut's GWSA targets.

> Comment: It appears that the proposal aligns the treatment of RECs with respect to electricity and emissions. I.e., currently they are not treated the same. This seems to be a logical correction and one that each state in New England could/should do.

Proposal 2: Using appropriate emission factors, determine the carbon dioxide equivalent (CO2e) from electricity generated from all non-biogenic fuels consumed within the ISO-NE region and from electricity imported into ISO-NE.

> Comment: It isn't clear that this is a change in approach. Surely, we don't now use inappropriate factors as a matter of policy?

Proposal 3: Determine the CO2e associated with emission of methane (CH4) and nitrous oxide (N2O) associated with biogenic fuels used to generate electricity and add this to the regional total, in line with international protocols.

> Comment: Consideration of methane leakage is important in calculating the GHG footprint of Connecticut electricity consumption. It would be useful to know what leakage rate is used in the calculation and what multiplier is applied to Methane leakage (CO2 equivalent factors range from 20 to 100!)
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> The thrust of this recommendation seems to be to bring Connecticut's accounting for biofuels used in the electric sector into conformity with international protocols. This international protocol counts biofuels as 0 carbon. We agree that conformity with this international standard is appropriate. However, we recommend that CT DEEP recognize that not all biofuel is created equally. To take an extreme example – one can imagine bio fuel created from Palm Oil sourced thousands of miles away that contributes to deforestation in the source country contrasted with biofuel created from locally sourced waste products. One is highly undesirable (and decidedly not really net zero) and the other is desirable and close to net zero. Recognizing this diversity of bio fuels, we recommend:
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> - CT DEEP keeps separate track of the credit to GHG from adopting this international standard

- CT DEEP establish, perhaps in conjunction with other New England states, a mechanism to track the sourcing of bio fuel and a mechanism to validate the sourcing.
- And finally, that CT DEEP state the desired attributes for bio fuels as it adopts this accounting change – even though it does not have the tracking mechanism nor the administrative authority to use it. I.e., as the state adopts this accounting change it should state its expectation that the biofuel be truly close to net zero.

Proposal 4: Determine CO2e emissions associated with RECs retired in Connecticut and subtract the emissions and electricity from the ISO-NE regional mix.

Comment: As above this seems appropriate.

Proposal 5: Credit Connecticut with its share of electricity and associated environmental attributes generated at the Millstone facility.

Comment: We presume that the status quo is that Connecticut only claims a pro rata share of the carbon free attributes of the Millstone plant despite the fact that over 50% of it is purchased directly on behalf of Connecticut. The accounting change to align direct procurement of a resource with Connecticut's credit for carbon free electricity seems to be appropriate – however the other New England states should be notified of Connecticut's unilateral move.

Proposal 6: For Connecticut's remaining electricity consumption, determine the associated emissions via a calculated regional emission factor.

Comment: This is a logical follow on to the other proposed changes.