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October 7, 2021

Public Act 08-98

AN ACT CONCERNING CONNECTICUT GLOBAL WARMING SOLUTIONS

NOTICE OF OPPORTUNITY FOR PUBLIC COMMENT AND PUBLIC MEETING REGARDING ACCOUNTING FOR GREENHOUSE GAS EMISSIONS FROM THE CONSUMPTION OF ELECTRICITY

In accordance with Public Act No. 08-98, An Act Concerning Connecticut Global Warming Solutions (Global Warming Solutions Act, GWSA), as amended by Public Act No. 18-82 An Act Concerning Climate Change Planning and Resiliency (the Act), the Department of Energy and Environmental Protection (DEEP) has issued a greenhouse gas (GHG) inventory documenting the economy-wide GHG emissions for Connecticut for the years 1990-2018 (GHG Report). As codified by Section 22a-200a(a)² of the General Statutes of Connecticut:

The state shall reduce the level of emissions of greenhouse gas:

- 1. Not later than January 1, 2020, to a level at least ten per cent below the level emitted in 1990:
- 2. Not later than January 1, 2030, to a level at least forty-five per cent below the level emitted in 2001; and
- 3. Not later than January 1, 2050, to a level at least eighty per cent below the level emitted in 2001.

The findings of the GHG Report indicate that the State is not currently on track to meet the reduction goals set by these acts.

A point of significant progress toward realizing the goals set forth by the legislature is in the electricity consumption sector, where emissions continued to decline in 2018 despite a relatively warm summer leading to increased electricity demand for cooling and some severe winter weather necessitating temporary reliance on combustion of coal and oil to meet electricity demand. This improvement stands in contrast to an increase in economy-wide emissions in 2018 over previous years. Governor Lamont's Executive Order No. 3 directs DEEP to "analyze pathways and recommend strategies for achieving a 100% zero carbon target for the electric sector by 2040."

¹ CT Greenhouse Gas Inventory Reports

² https://www.cga.ct.gov/current/pub/chap 446c.htm#sec 22a-200a

³ Executive-Order-No-3.pdf-rel= (ct.gov)

While monitoring progress toward achieving compliance with Executive Order No. 3, and as electrification progresses on processes that currently rely on direct combustion of fossil fuels, it is imperative that the State's inventory of GHG emissions from the electric sector is as accurate as possible, and reflects regional and international standards.

I. Background

In a March 2016 report⁴, the Governor's Council on Climate Change (GC3) recommended that DEEP employ a consumption-based methodology for calculating the electricity sector's contribution to the GHG inventory. Consumption-based accounting more accurately reflects the regional nature of the electric grid and allows states to monitor how their electricity demands contribute to regional GHG emissions.⁵ DEEP adopted a consumption-based methodology for determining GHG emissions in the electric sector beginning with the GHG inventory for 2013,⁶ (which was published in 2017).

While a consumption-based methodology is a more accurate way to account for the state's emissions, additional improvements to its implementation can be made to improve its precision. In the consumption-based methodology DEEP adopted, the agency tabulates regionwide GHG emissions from all of the electricity produced in the ISO-NE region as well as from electricity imported into the ISO-NE region. DEEP calculates a regionwide GHG emission factor (in pounds of carbon-dioxide equivalent emitted per megawatt hour of electricity generated) and applies this to determine the state's emissions from electricity consumption. The electricity associated with Renewable Energy Certificates (RECs) retired in Connecticut are counted toward the state's total electric load, while emissions associated with RECs are accounted for during calculation of the regional emission factor rather than attributed to an individual state. GHG emissions associated with the combustion of biogenic fuels for electricity are currently combined with emissions from the combustion of fossil fuels and counted against Connecticut's emissions targets for this portion of the GHG inventory. This is in contrast with international accounting norms in which biofuels are treated as carbon neutral.

Another significant shortcoming of the current methodology is that it would not reflect the significant investment Connecticut has made in the Millstone nuclear generating facility in upcoming GHG inventories. In 2019, the Public Utilities Regulatory Authority approved a contract in which Connecticut's two electric distribution companies purchase approximately 55% of Millstone's energy (approximately 9 million MWh/year) and all of the environmental attributes associated with the facility (approximately 16.5 million MWh/year) for 10 years. Prior to the agreement, Millstone was at risk for early retirement, posing a significant challenge for the state reaching its 2030 emission goals. In accordance with Executive Order No. 3, the state's Integrated

⁴ GC3 Exploratory Report (ct.gov)

⁵ In fact, Connecticut generates more electricity than it uses and exports excess energy to the other New England states

⁶ CT2013GHGInventorypdf.pdf

⁷ Governor Lamont Applauds PURA Approval of Millstone Contract Between Dominion, Eversource, and United Illuminating

Resources Plan⁸ proposes pathways for achieving this target, including scenarios in which Millstone remains in service beyond 2029. Beginning with the 2019 GHG inventory, which DEEP expects to publish in 2022, the agency will need to modify its electric sector methodology in a manner that properly accounts for Connecticut's contracts for environmental attributes such as Millstone, offshore wind, and solar.

II. Written Comments and Public Meeting

DEEP welcomes the submission of written comments on the proposed updates to the GHG accounting for the electric sector. DEEP proposes the following updated methodology:

- 1. Credit Connecticut with electricity from RECs retired in Connecticut and count associated non-biogenic emissions against Connecticut's GWSA targets.
- 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.
- 3. Determine the CO_2e associated with emission of methane (CH4) and nitrous oxide (N_2O) associated with biogenic fuels used to generate electricity and add this to the regional total, in line with international protocols.
- 4. Determine CO₂e emissions associated with RECs retired in Connecticut and subtract the emissions and electricity from the ISO-NE regional mix.
- 5. Credit Connecticut with its share of electricity and associated environmental attributes generated at the Millstone facility.
- 6. For Connecticut's remaining electricity consumption, determine the associated emissions via a calculated regional emission factor.

Written comments may be submitted directly to DEEP at DEEP.EnergyBureau@ct.gov on or before **November 9, 2021**, and should include "Electricity sector greenhouse gas emissions written comments" in the subject line. All materials submitted by stakeholders and other participants in this proceeding will be posted on the DEEP website.

In addition to this opportunity for public comment, DEEP will hold a Public Meeting to gather stakeholder and community input. The meeting is on **October 26, 2021, at 1:00 PM** and will provide an overview of the methodology.

Participants can register for the Public Meeting here:

October 26, 2021, at 1:00 PM: Register Here

The Connecticut Department of Energy and Environmental Protection is an Affirmative Action/Equal Opportunity Employer that is committed to complying with the requirements of the Americans with Disabilities Act. Please contact us at (860) 418-5910 or deep.accommodations@ct.gov if you: have a disability and need a communication aid or service; have limited proficiency in English and may need information in another language;

⁸ Integrated Resource Planning (ct.gov)

or if you wish to file an ADA or Title VI discrimination complaint. Any person needing a hearing accommodation may call the State of Connecticut relay number - 711. Requests for accommodations must be made at least two weeks prior to any agency hearing, program, or event.