Meeting Minutes Thursday, August 17, 2023

Carbon Life-Cycle Analysis (CLCA) House Bill (HB) 2026 Virginia Department of Forestry (DOF) Board Room

<u>Stakeholder in Attendance</u>: Rob Farrell (DOF); David Carr (SELC); Martha Moore (VAFB); Corey Conners (VA Forestry); Nikki Rovner (TNC); Judy Dunscomb (TNC); Mike Davis (NOVEC); Ember Jenison (DOF); Jennifer Leach (DOF)

Others in Attendance: Brad Coppenhaver, Virginia AgriBusiness Council

<u>Stakeholder Representative Virtual Attendees</u>: Brent Hughes (DOE); Larry Corkey (DOE); Liz Willoughby (Dominion Energy); Ed Cronin (DOE); Ron Jenkins (VA Loggers); Kyle Shreve (VFA/Advantus Strategies); Elizabeth Gayne (Dominion Energy); Mike Dowd (DEQ); Susan Seward (VFPA)

Other Virtual Attendees: Tom Baumann (DOF)

The meeting convened at 9:00 AM and adjourned at 11:50 AM

Welcome

Rob Farrell (State Forester, DOF) welcomed the stakeholders back for the third Carbon Life-Cycle Analysis (CLCA) meeting. Everyone in attendance introduced themselves and Rob reviewed the plan and goals for the meeting: 1) Discuss objective and purpose statements for the life cycle analysis (LCA). 2) Identify and review the changes in the legislation and determine if those changes have potential impacts on atmospheric carbon. 3) Based on those changes, determine how the group is going to assess the carbon impacts of those changes.

Discussion of LCA Objective and LCA Purpose and Review Changes in the Legislation (HB2026)

Farrell presented the group with draft LCA Objective and Purpose statements which the group discussed.

The group then identified and reviewed each change in HB2026 and determined if the changes had a potential impact on atmospheric carbon and which will provide the framework for the carbon analysis.

- Change #1: specific to the three Dominion facilities at Southampton, Hopewell and Altavista (The Triplets).
- Change #2: Dominion power plant at Virginia City is not included.
- Change #3: Removes language that excluded Phase 1 and Phase 2 utility biomass plants from being eligible for RECs.

Change #4: Includes manufacturing residuals in biomass definition, makes the three Dominion facilities eligible for RECs, and requires biomass harvesting to comply with BMPs for sustainable biomass harvesting developed and enforced by the State Forester.

Change #5: Changes the year of the annual cap for REC-eligible megawatt hours from 2019 to 2022. The questions raised was if the change in date also applies to WestRock and enable them to get more RECs? Brad Coppenhaver, Virginia AgriBusiness Council, will follow-up on this question.

Change #6: Only biomass facilities operating in Virginia would be eligible for RECs.

A member mentioned he found an article, "Implementation of Forestry Best Management Practices on Biomass and Conventional Harvesting Operations in Virginia" written in 2016 by Dr. Scott Barrett, Virginia Tech Cooperative

Extension, that the group may find useful to read. The article talks about implementation of BMPs, litter impact, etc., and also has data with respect to audited sites. The member suggested Dr. Barrett be a subject matter expert for the group.

The group agreed on all that was discussed regarding the changes to HB2026 and continued the discussion with what the Department of Forestry is charged to do in enactment clauses #2 and #3 of HB2026.

The group started their discussion with enactment clause #3; "That the Department of Forestry shall develop, no later than December 1, 2023, best management practices for the sustainable harvesting of biomass...". The group agreed on the following:

- 1. The BMPs will impact and reduce the atmospheric carbon and these BMPs have to be accounted for in the analysis.
- 2. The BMPs are going to be based on sustainable harvesting of biomass.
- 3. The BMPs have to be implementable, and the logging community has to be able to follow them and the Department of Forestry has to be able to enforce them.

The group went on to discuss enactment clause #2: "That the Department of Forestry (the Department) shall convene an advisory panel to examine the use of the forest-related materials, agricultural-related materials...". The group agreed that nothing mentioned in item #2 has any effect on carbon emissions. The group agreed to work on enactment clause #2 in early 2024.

After the discussions, the group was in consensus that they were not ready to start laying out the scenarios, but they did finalize the LCA Objective and Purpose statements which are:

LCA OBJECTIVE: Assess the difference in atmospheric carbon resulting from the changes in HB2026.

LCA PURPOSE: Use the LCA to inform DOF development of biomass BMPs to ensure sustainable biomass harvesting.

Discussion of Scenarios

Farrell returned to the two scenarios he brought up in the first meeting which were if HB2026 was not passed and HB2026 being passed. The group agreed these are the scenarios they should focus on. The core piece of data is how much carbon would be produced at the Dominion facilities under the two scenarios. The group will need to provide Dominion the following information for in order for Dominion to provide information to the group:

- 1. What information is available about the fuel.
- 2. Amount of mill residue.
- 3. Amount coming straight out of the forest.
- 4. What is being burned.
- 5. What is anticipated to be burned.
- 6. What is our best estimate of how those plants would have been phased out had the legislation not passed.

Mike Dowd, DEQ, could help look at what data DEQ has for permits and biomass data that Dominion brings in and can give capacity factors, how much they have been operating and what their emissions are on their permit. Information can also be pulled off the EPA Website.

Elizabeth Gayne, (Dominion Energy), pointed out that the direct CO2 emissions from combustion at the facility is only one piece of the carbon discussion that needs to go into the LCA. It will be important for the group to describe the methodology of the LCA and more specifics on the modeling before Dominion begins preparing data to ensure that Dominion can provide information in the proper format.

Next Steps

- 1. Is the group talking about annual comparisons between the two scenarios?
- 2. What is the currency between the two scenarios that data will need to be converted to or produced in.

A member asked Dominion Energy if they had information of how much feed stocks from sawmills, residue vs. loggers and wood, were coming into their Salem facility. Elizabeth Gayne said she and Elizabeth Willoughby will work with the subject matter experts and Dominion to see what information is available. Rob will email Elizabeth Gayne and Elizabeth Willoughby the following request: "how much biomass by ton is being utilized at each facility in a year and what proportion of that biomass comes from mill residuals versus forest residual versus anything else?"

<u>LCA 'Light'</u> – Farrell further described this concept as using some estimates based on existing data applied to what variables the group can identify for Virginia. Some pieces will probably not be figured out this year. The group is trying to get to the same end point, and that is: analyze as much data as possible to the best degree, recognizing that the group will not be able to complete everything before December 1, 2023. The term LCA 'light' is how deep into this data analysis can we get in the provided timeframe knowing that the analysis will continue this summer, fall, and into next year.

The biomass harvesting BMPs have to be completed this year (2023) and the group will utilize all of the information they are able to receive between now and December of 2023.

Scenario Approach

Rob shared with the group his thought on the two scenarios: with HB2026 and without HB2026 (attached). The group would like to look at this closer before commenting on the scenarios presented.

Group Homework

- Consider the two approaches to the scenarios.
- Review the materials in the Share-Point file.
- Anyone who has suggestions for competent professionals to help us.
- Rob Farrell to talk to Dr. Scott Barrett and someone he knows at the College of Natural Resources and Environment (CNRE).
- Be prepared at next meeting to discuss the scenario approach and Judy Dunscomb's list of data needs shared on Share-Point.

Meeting Adjourned

Current Scenario (##C)

With HB2026/SB1231

Allows the 3 Dominion biomass plants to continue operating until 20XX.

Also allows the sale of RECs.

2023 – Carbon from anticipated tons (23C tons) of biomass utilized at the three facilities & associated carbon to harvest and transport & loss of sequestration. (May be increased from business as usual due to RECs market.)

2024 - Carbon from anticipated tons (24C tons) of biomass utilized at the three facilities & associated carbon to harvest and transport & loss of sequestration.

2025 -

20XX – They stop burning biomass even with this legislation?

Alternative Scenario (##A)

Without HB2026/SB1231

The VCEA would mandate the following changes:

The 3 Dominion biomass plants would reduce electricity production and biomass utilization from year 20XX to 20XX and completely stop burning biomass in year 20XX.

Anything else relevant to this analysis?

2023 – Carbon from anticipated tons (23A tons) of biomass utilized at the three facilities & associated carbon to harvest and transport & loss of sequestration.

(23C-23A tons) allocated among likely alternative outcomes such as:

- Harvest residuals left in the woods to rot
- Harvest residuals open burned
- Low-value trees not harvested

Carbon from electricity produced another way

2024 – Carbon from anticipated tons (24A tons) of biomass utilized at the three facilities & associated carbon to harvest and transport & loss of sequestration.

(24C-24A tons) allocated among likely alternative outcomes such as:

- Harvest residuals left in the woods to rot
- Harvest residuals open burned
- Low-value trees not harvested

Carbon from electricity produced another way

2025 -

Above and below ground carbon release and loss of sequestration due to forest conversion.

20XX – They stop burning biomass