Clean Heat Standard Technical Advisory Group 16 February 2024, 10:00 am-1:00 pm

Agenda

(Times are aspirational)

Meeting Link: https://meet.goto.com/263652093

DRAFT

- I. Welcome. Chair (5 minutes)
 - a. Initiate recording
- II. Review of the agenda. Chair (5 minutes)
 - a. Additions, changes
- III. Review and approval of the 2/2/24 meeting minutes. Chair (5 minutes)
- IV. Updates from the PUC (30 minutes)
 - a. General CHS Update
 - b. PUC update on facilitation services
 - c. Status of technical consultant contract
 - 1. You can find the SOW at https://puc.vermont.gov/document/clean-heat-standard-technical-consultant-rfp
- V. Communication from Equity Advisory Group 8 priority objectives. PUC Staff (10 minutes)¹
- VI. Schedule and the sequencing of TAG tasks. Vice Chair and Ken Jones (20 minutes)
 - a. Relating the TAG's work to the legislation's requirements
 - b. Public comment
- VII. Work groups. Chair (40 minutes)
 - a. Identify work group subject matter and prioritize. Possible topics:
 - i. Market scenarios, credit trading
 - ii. Measure characterizations
 - iii. Credit values (early action credits)
 - iv. Emissions schedule
 - v. Retirement schedule (required amounts)
 - vi. Credit ownership
 - vii. Reconciling life-cycle emissions with inventory emissions
 - 1. The question of wood
 - b. Public comment
- VIII. Other matters. Chair (10 minutes)
- IX. 7 March meeting agenda. Chair (5 minutes)
 - a. Reports from work groups
 - b. Debrief on PUC workshop on retirement schedule process (required amounts)
 - c. DPS potential study; discussion with DPS technical consultant, NV5
- X. Close. Chair (10 minutes)
 - a. Public comment

_

¹ The Equity Advisory Group adopted eight objectives as priorities that the group requests the Technical Advisory Group keep in mind as they complete their work: Health, Affordability, Accessibility, Just Transition, Community Capacity, Cultural Preservation, Accountability, and Geographic Availability.

To: Technical Advisory Group of the PUC for the Clean Heat Standard

From: Ken Jones, Emily Levin, TAG members

Date: February 15, 2024

Topic: An attempt to organize the schedule of activities in carrying out Act 18

The PUC presented a draft schedule of activities that represents the effort to implement Act 18. This draft was posted on December 21, 2023. The PUC has not yet finalized the schedule and timelines are already shifting.

The full list of activities is daunting and we are taking this opportunity to provide some organizational structure that may help TAG members and others to see the relationship between the activities included on the draft PUC schedule. In addition, there are a few topics where there are multiple phases for the same or very related activity.

The structure is based on six categories of activities:

- 1. Determining levels of GHG reduction required
- 2. Characterizing clean heat measures and setting credit values
- 3. Planning for delivery of clean heat measures through the DDA and obligated entities
- 4. Establishing the market for credit exchange
- 5. Low and Moderate Income considerations
- 6. Program administration

1. Determining levels of GHG reduction required

These activities are scheduled in two timeframes, the first to establish the principles and process and the second to finalize numerical amounts. This set of activities includes the "Total Retirement Schedule", the "Annual Retirement Schedule" (specific schedule for individual obligated entities), and "Pacing." It includes the following topics:

- Process for determining the required amounts of GHG reduction needed to meet the 2030 and 2050 GWSA reduction requirements.
- Setting the required annual lifecycle GHG emissions reductions needed to meet the targets.

This is a key topic for TAG involvement and will be active in the Feb-April 2024 timeframe. Specifically, the TAG is responsible for:

- Establishing and revising the lifecycle CO2e emissions accounting methodology to be used to determine each obligated party's annual requirement; and
- Coordinating with ANR to ensure that GHG reductions achieved in another sector through the implementation of the Clean Heat Standard are not double-counted in the Vermont Greenhouse Gas Emissions Inventory and Forecast.

2. Characterizing clean heat measures and setting credit values

This set of activities includes the following topics from the PUC schedule.

- Credit values (assigning the specific emission reductions to each measure)
- Emissions schedule (the assignment of CO2e emissions for each thermal fuel this includes the relationship between GHG Inventory calculations and Life Cycle Accounting based calculations)
- Carbon intensity of fuels (similar to the Emissions schedule with a focus on "liquid and gaseous clean heat measures") The principles involved in this topic may also be important in considering how wood heat should be characterized, both as a Clean Heat Measure and in calculating credit values when wood heat is displaced.
- Process for adopting new clean heat measures
- Review of consequences (this step will identify the potential consequences of measure installation other than GHG reduction, such as public health and environmental impacts)
- System of tradable clean heat credits

What is not included in the schedule but is implied is the development of a list of clean heat measures starting with the broad topics identified in statute (heat pumps, weatherization, advanced wood heat, etc.) and requiring more specificity for each technology.

This set of topics will involve significant TAG involvement, as well as extensive interaction with the technical consultant, who is responsible for developing measure characterizations for clean heat measures. Specifically, the TAG is responsible for:

- Establishing and revising the clean heat credit value (aka the lifecycle GHG emissions reductions) for different clean heat measures;
- Setting the expected life length of clean heat measures for the purpose of calculating credit amounts;
- Establishing credit values for each year over a clean heat measure's expected life, including adjustments to account for increasing interactions between clean heat measures over time so as to not double-count emission reductions; and
- Calculating the impact of the cost of clean heat credits and the cost savings associated with delivered clean heat measures on per-unit heating fuel prices.

It also includes a set of tasks related to assessing the public health and environmental impacts for clean heat measures:

- Periodically assessing and reporting to the Commission on the sustainability of the
 production of clean heat measures by considering factors including greenhouse gas
 emissions; carbon sequestration and storage; human health impacts; land use
 changes; ecological and biodiversity impacts; groundwater and surface water
 impacts; air, water, and soil pollution; and impacts on food costs;
- Calculating the savings associated with public health benefits due to clean heat measures.

The PUC proceeding is set to begin considering these issues in February 2024, but the specific deadlines and process for TAG input are not yet clear.

3. Planning for delivery of clean heat measures through the DDA and obligated entities

This topic is the design of the process and review of the plans for the DDA to carry out its credit development and acquisition and the plans for the Obligated Parties to also develop and acquire credits.

- Use of Default Delivery Agent (which includes the process for obligated parties plans)
- Default Delivery Agent Budget

The draft schedule from the PUC does not yet include a schedule for the actual review of Obligated party plans, which takes place after submission of the DDA budget. And, after submission (and approval) of the Obligated party plans, the DDA may adjust its budget.

While we call this topic area "Planning", the DDA budget represents a starting point for considering the costs for credit development, which is going to be critical in the public and legislative review of this implementation process.

4. Establishing the market for credit exchange

When the system is in place, the following types of transactions are envisioned in the legislation:

- 1. Credit creation, both with direct connections to the DDA or the Obligated parties, and creation of credits independent of the DDA and Obligated parties
- 2. Credit exchange between independent credit formation and the DDA
- 3. Credit exchange between independent credit formation and the Obligated parties
- 4. Credit exchanges and payments between the DDA and Obligated parties

To establish these transactions, the PUC has scheduled the following topics:

- System of tradeable clean heat credits (also noted under Credit Characterization)
- Banking, trading, and retiring clean heat credits
- Credit trading platform
- Credit eligibility (recognition that some measures are "derived from other state and federal programs" and may have different impacts on the market)

The Credit Characterization and Planning activities will also be critical to the ultimate functioning of the market.

5. Low and Moderate Income Considerations

Each topic should consider Low and Moderate Income building owners and renters within its scope. Additionally, the PUC has specifically identified:

Equitable Distribution of Clean Heat Measures

This topic will be of paramount importance for the Equity Advisory Group, but could relate to several TAG topics as well.

6. Administration

Beyond the four topic areas described above, the PUC recognizes that certain steps will be necessary to carry out the implementation of this Clean Heat Measure system. These include:

- Annual registration
- Enforcement (having an impact on market prices)
- · Records (informed by the Credit Characterization activities)
- Second checkback report to the legislature (due Jan. 15, 2025)