Clean Heat Standard Technical Advisory Group

January 19, 2024 Meeting Minutes

Attendees

- Members of the Technical Advisory Group present
 - o TJ Poor (designee of Melissa Bailey), Vermont Department of Public Service
 - o Jared Ulmer, Vermont Department of Health
 - o Brian Woods, Vermont Agency of Natural Resources
 - o Matt Cota, Meadow Hill Consulting
 - o Luce Hillman, University of Vermont
 - o Ken Jones, Individual
 - o Michelle Keller, Fraktalas Energy
 - o Casey Lamont, Burlington Electric Department
 - o Sam Lehr, Coalition for Renewable Natural Gas
 - o Emily Levin, Northeast States Coordinated Air Use Management
 - o Emily Roscoe, Efficiency Vermont
 - o Floyd Vergara, Clean Fuels Alliance America
 - o Michael Wang, Argonne National Laboratory
 - o Rick Weston, Individual
- Non-Member Participants
 - o Ben Plotzker, Efficiency Vermont
- Participating Vermont Public Utility Commission staff
 - Erin Hicks-Tibbles
 - o Tom Knauer
 - Deirdre Morris
 - Tracy Myers
 - o Dominic Gatti
- Participating Members of the public
 - o Annette Smith
 - John Brabant

Meeting commenced at 10:03 am ET

• Welcome

- Commission staff intends to serve as the moderator for this meeting for the sake of efficiency as the group decides on leadership roles; if any members of the group object to this arrangement for today, make your concern known. No members indicated any issue with this arrangement.
- The Department of Public Service notified Commission staff that Melissa Bailey designated TJ Poor to serve as a full member of the Technical Advisory Group on behalf of the Department.
- Emily Roscoe of Efficiency Vermont notified Commission staff that she will be joined today by Ben Plotzker as a non-member participant from Efficiency Vermont to contribute to today's discussions.

Note: Struck items indicate the agenda item was not covered during the meeting.

- Review agenda opportunity for members to add agenda items
 - Commission staff walked through the proposed agenda. A member suggested, and the group assented to, adding a recap of the previous Equity Advisory Group meeting to the agenda. Other members chimed in to suggest this topic be addressed within the "PUC to share status of work on the Clean Heat Standard" section and that the minutes from the Equity Advisory Group meeting be included in the Technical Advisory Group's meeting materials. Another member suggested adding the topic of wood and pellet stoves to the list; Commission staff indicated that they recognized the importance of the issue and would be happy to add it to the end of the agenda but did not have anything prepared on the subject.
- Review and approve 12/11/23 meeting minutes
 - Members had a brief discussion on how detailed meeting minutes should be, with some feeling that the level of detail in the draft minutes at hand was more detailed than they needed to be and others finding the level of detail useful for revisiting or catching up on previous meetings. Commission staff said they would continue to take as detailed and accurate minutes as possible, and that the Technical Advisory Group was welcome to decide to record meetings if it desired. Some members thought it would be useful to record to revisit conversations or watch meetings that they missed, others felt that it was unlikely that they (or others) would actually go back and watch a three-hour recording.
 - o Group members also discussed the use of the chat feature in GoTo Meeting and what was an appropriate use of it, especially for non-Technical Advisory Group members. Some members argued that it was inappropriate and distracting to have non-members use the chat to functionally participate in the conversation. A member brought up that they felt having public comment only at the end of an agenda that covered a variety of topics was an insufficient way to hear and incorporate public input; they suggested adding a few minutes for public comment near the end of agenda items where the group was going to take an action. Commission staff asked if there were any objections to allowing approximately 2 minutes of public comment per person ahead of actions taken by the Technical Advisory Group; no objections were heard (10:33 am).
 - O Some group members had a few requests for amending the previous minutes:
 - Ken Jones clarified that he is not part of the Energy Action Network (EAN) and does not represent EAN's positions or opinions. He requested to remove the EAN designation from his name in the last minutes and on the appointment order.
 - Members named in public comments during the December 11, 2023, meeting as being inappropriate to serve as leaders from this group due to their previous organizational affiliation disputed the relevance of their former organization, rejected the accusation that they would be biased in this work, and emphasized that they do not have interests that would conflict with their work as part of the Technical Advisory Group.

- A member suggested a correction to replace the phrase "group agreed that" with language that did not imply there was some formal action taken by the group to sanction an action or state an opinion on page 5 of the draft minutes.
- Commission staff said they would create a redline of the previous minutes incorporating the suggested for consideration and approval by this group at their next meeting.
- PUC to share status of work on the Clean Heat Standard
 - Commission staff provided an overview of the work that has been done since the Technical Advisory Group last met:
 - In Case No. 23-2220-RULE, the Commission issued orders on the topic tag system, early action credits, registration, a draft schedule, and some procedural orders. In this case, the Commission received filings on funding streams, credit ownership, advisory group procedures, and a legal briefing on the confidential treatment of business information. The Commission hosted workshops on funding streams and credit ownership. The Commission also published and went live with the fuel dealer registration form and requested fuel tax information from the Vermont Department of Taxes.
 - In Case No. 23-2221-INV, the Commission issued orders adopting a schedule and requesting comments on the criteria, number, and scope of Default Delivery Agent(s). No comments had been filed on that topic yet, but staff expected some soon.
 - For contractors, the Commission is moving forward in the process with both the Public Engagement Facilitator contractor and the Emissions Analyst technical consultant. Commission staff indicated that they were just waiting on signatures and would share more information as soon as it is available. Commission staff also said they were exploring contracting someone to serve as the support staff for the Technical and Equity Advisory Groups to assist with administrative tasks.
 - o Review of the last Equity Advisory Group meeting
 - Commission staff provided a brief overview of what occurred at the last Equity Advisory Group meeting, mentioning that the group spent a substantial amount of time discussing draft procedures and officer roles, talked about the draft schedule that was published in the 23-2220-RULE case, and had a substantial discussion about possible funding streams. The minutes of that meeting can be found here.
 - Group members had further questions about the status of the technical consultant, and Commission staff clarified that they hoped to have signatures on contracts early the following week. Commission staff also clarified that their efforts to find an administrative contractor to support the advisory groups were distinct from both the Emissions Analyst technical consultant and the Public Engagement Facilitator consultant.

- Group members also had further questions about the potential advisory group facilitator; Commission staff explained that they had heard both the Technical and Equity Advisory Groups clearly that they felt they needed more administrative support, and the Commission is looking for possible contractors now. The staff has written and circulated a brief description of work to try to solicit bids for a simplified bidding process but has yet to get any responses. A member asked if funding had been identified and staff said that if anyone has ideas for sources of funding, please share them with the Commission.
- Review current draft of procedures (incorporates public comment, TAG feedback)
 - Commission staff walked through the updated draft procedures, focusing on the most significant update, the addition of Section VII – Administration.
 - o Group members had some suggestions on the procedures; specific suggested changes included changing an "or" to "and" in Section VIII(D) and (E) related to collaborating with the technical consultant, detailing how group members can collaborate on specific work products, and clarifying how Open Meeting Law applies to sub-groups of the Technical Advisory Group.
 - O Group members discussed the use of Robert's Rules of Order, pointing out that using Robert's Rules of Order implies majority rule within the group. Some members continued to hold reservations about using what can be a rigid meeting organization system, others were more comfortable having a set of rules to organize the meetings around and were confident the group could adapt or amend the rules to fit their needs.
 - Group members also discussed the method of adoption and amendment of these procedures and expressed concern that having to get items changed through an Order of the Commission may slow down fixing broken procedures and suggested that Commission staff be authorized to make changes to the procedures.
 - Commission staff thanked the group for their input and said they would be going to the Commissioners to finalize the procedures soon.
 - At the conclusion of the discussion of draft procedures, a group member inquired if it would be an appropriate time to solicit public input on the procedures in accordance with the agreement made earlier in the meeting to take public input on individual agenda items; Commission staff pointed out that there had been multiple opportunities for written public comment on the issue and that the advisory group was not making a decision at this moment. Hearing no strong opinions from group members on this topic, Commission staff moved the meeting along in an effort to get to more substantive topics.
- Discuss election of Chair, Vice Chair
 - O Commission staff solicited nominations from group members. Initially, Matt Cota nominated Brian Woods as Chair and TJ Poor as Vice Chair. Discussion on the nomination brought up a concern that both nominees are members of the Administration, and the Administration has not always been supportive of the potential Clean Heat Standard. Others pushed back and said that at no time has

- Department staff been unfair or biased in working on this topic. TJ Poor indicated that he does not have the capacity to serve as the chair. Matt Cota withdrew his nomination of TJ Poor to be Vice Chair.
- Brian Woods said he appreciated the nomination but would not be able to formally accept or decline until he had a chance to speak with others at his Agency. Other group members indicated support for Brian Woods to serve as Chair, pending support from the Agency of Natural Resources.
- Another member asked Rick Weston if he would be interested in serving in either leadership role. Rick Weston said he would be happy to serve however the group wanted him to.
- Luce Hillman nominated Rick Weston for Vice Chair, Ken Jones seconded (11:35 am). Discussion on the topic asked if there were any time limits for Officers; Commission staff said that the procedures were silent on that issue. A group member asked for bios or other information about Rick Weston and Brian Woods, Rick Weston directed members to his LinkedIn and said he could send around his resume. Ken Jones suggested the group take a break, and during the break Rick Weston's resume can be considered. Commission staff presiding heard no objections to the suggestion and the group recessed at 11:38 am.
- O The group reconvened at 11:51 am. Floyd Vergara moved to postpone consideration of the nomination of Rick Weston until the group heard back from the Agency of Natural Resources on Brian Woods' ability to serve as Chair or the group otherwise had two people to consider as Chair and Vice Chair. Matt Cota seconded the motion (11:56 am). Discussion on this motion by group members covered a desire to keep moving forward and get to substantive topics, a concern about having only half a leadership team for the next meeting, and an understanding that the group would revisit the topic after Brian Woods got clarification from his Agency. The motion to postpone was defeated (11:59 am). Rick Weston was elected as Vice Chair (12:00 pm).
- Revisit sequencing of group's statutory tasks; see draft -RULE schedule
 - Commission staff walked the group through the draft schedule in Case No. 23-2220-RULE and asked the group members for informal feedback on what order the Commissions should consider these items in. Group members indicated that it would be helpful to understand how the statutory responsibilities of the Technical Advisory Group overlap with the items identified in the draft schedule. Group members also suggested that some tasks should be grouped together to streamline feedback provided by the Technical Advisory Group and commenters in general.
 - O A group member pointed out that there were items for consideration by the Technical Advisory Group listed on the draft schedule that preparations have not begun for. Commission staff reiterated that the schedule was a draft and that the Commission would be putting out another order establishing a final schedule and that specific dates on the draft calendar were approximate.
 - The group discussed different ways to create the crossover list; having the technical consultant create the list, having support staff create the list, having a

working group create the list, and having the Vice Chair create the list were all contemplated approaches. The Vice Chair said he would be comfortable working with Commission staff to put a crossover list together as it falls in line with the agenda-setting function assigned to the group leadership in the draft procedures.

- Discuss emissions accounting conflict
 - o Commission staff introduced the issue of aligning emissions measurement between the Global Warming Solutions Act and the lifecycle approach required for potential Clean Heat Measures. The Department of Public Service and the Agency of Natural Resources explained the conflict. In summary, the fundamental issue is that Act 18 requires the potential Clean Heat Standard to achieve targets set by the Global Warming Solutions Act, which relies on the Vermont Greenhouse Gas Inventory, which tracks emissions in non-lifecycle terms, but the credit values for the potential Clean Heat Standard must be expressed in lifecycle terms. There is a way to approximate a conversion factor between lifecycle and non-lifecycle accounting, but developing them for each Clean Heat Measure and Clean Heat Measure component would be timeconsuming, difficult, and rely on numerous assumptions. This issue directly impacts the potential success of the program because the marketplace for Clean Heat Credits would be immature and it would be difficult to predict exactly how obligated entities would respond to the dynamic relationship between the market and calculated equivalency factors based on contested assumptions.
 - Group members asked numerous questions on the topic which were answered and discussed by representatives from the Department of Public Service and the Agency of Natural Resources.
 - One group member asked about how lifecycle analysis might impact the 1990 emissions baseline, and if the mismatch in measuring emissions reductions would risk not properly complying with the Global Warming Solutions Act. In answering the first part of the question, the 1990 baseline numbers are not in lifecycle measurements and the Agency of Natural Resources does not currently have plans to recalculate the 1990 baseline using lifecycle measurements. The second question is more difficult to answer as obligated entities would seek the lowest cost way to satisfy their requirements, and depending on the calculations and revisions, actual greenhouse gas emissions savings may not be fully understood.
 - Another member presented the example of biofuels and how upstream emissions are accounted for across inventory sectors, and offered the idea of electrifying appliances as a way to understand where different kinds of savings are realized. They asked if Vermont had a specific building-sector goal or what percent of statewide emissions reductions need to be achieved in the building sector. The member offered California as an example of a place that has rectified the lifecycle vs point in time measurements for emissions, explaining how their low carbon fuel

- standard (LCFS) is worked into the economy-wide targets. Other members pushed back, saying that the California comparison was not as apt because the two programs are separate, even if they are working towards the same goal. The LCFS is lowering the carbon intensity of fuels in the transportation sector but does not inherit its goals from the larger, economy-wide reduction framework. Vermont is required to square the lifecycle credit system of the Clean Heat Standard with the jurisdictional measure of the Global Warming Solutions Act. Vermont could do the math to try to convert between the two measurement approaches, but it would not be perfect.
- Another member asked if this measurement discrepancy would be able to be rectified/refined later in the life of the program to ensure that assumptions made in the effort to create a lifecycle-to-inventory conversion factor were corrected to reflect reality and check that the overall program was on track. Other members replied that adjusting later in time poses two main issues. First, a conclusion that fewer emissions reductions than necessary were actually realized would have consequences under the Global Warming Solutions Act and may trigger severe action. Second, adjusting the emission rates of Clean Heat Measures and obligation totals down the line would be a major disruption to the Clean Heat Credit market and could undermine the success of the program as uncertainty around the value of credits could derail their function in the program.
- Another member expressed the belief that this problem is not unique to Vermont and that California's approach to translating lifecycle crediting in the LCFS program into the larger emissions reduction accreditation system. They offered to share reports from California after the meeting and explained California's two-book style system for properly accounting for emissions reductions. They also said they would be interested in seeing modeling where the conflict between the two measurements arises.
- A group member pointed out that the group was running up against the scheduled end time and asked if the group wanted to extend their current meeting. Commission staff presiding said they wanted to respect people's time and looked forward to continuing the conversation at a future meeting. Commission staff asked for consent to open this topic up for public comment; no objections were made and the floor was opened for public comment on the topic of the emissions accounting conflict. No public comments were made.
- Commission staff indicated that they expected the group to continue working on this topic at the next meeting, along with discussing questions of credit ownership and treatment of wood fuel. They mentioned that the newly elected Vice Chair will be expected to help fit these issues onto future agendas.
- The floor was opened up for general public comment

- O John Brabant strongly advocated that the Technical Advisory Group record their meetings. He pointed out that smaller boards do it, it would likely be a simple thing to do, it would allow people who are not available to tune in during the day to keep up with the discussions, and it would be useful in revisiting these discussions in the future.
- Anette Smith noted that she appreciated the introductions at the beginning but felt they were no longer necessary, that she has observed the Climate Council extensively and the Administration has never obstructed its work, and that there was major news for the PUC, that new Chair had been named by the Governor.
- Commission staff said that they appreciated everyone's time and effort and that in the future, far more time would be spent on substantive issues. A member indicated that they wanted to meet again as a group within two weeks. Members discussed possible schedules for regular meetings, with some suggesting meeting every two weeks, others suggesting one full-group monthly meeting and smaller groups meeting to complete work between the monthly meetings. One member suggested meeting twice in a month but having the two meetings be at different times/days of the week.
 - One member said that the group needs to consider if the pace of work is actually realistic and that the group needs to be ready to recommend the Commission go to the legislature and say the current timeline is impossible if the group felt that was the case. Commission staff reminded the group that in the filings on the 23-2220-RULE schedule, two participants said the current timeframe was untenable and two participants explicitly suggested the Commission to go the legislature. A member said they believed the Equity Advisory Group would say something similar as the current pace does not leave enough time to have meaningful public engagement.
 - A member said they were interested in the idea of having working groups meet in between full Technical Advisory Group meetings but were not yet ready to establish those groups. They suggested meeting more frequently in the meantime and take meetings off in the future as the actual work was completed. Another member suggested meeting again in two weeks, on February 2, and discussing this topic again. Commission staff presiding asked if anyone was not able to make a meeting on Feb 2; hearing no conflicts, staff committed to sending out a notice for the next meeting.
- Brian Woods moved to adjourn, and Rick Weston seconded (1:14 pm). The meeting adjourned at 1:14 pm.
- Discuss issue of credit ownership
- Set meeting frequency and duration