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Holly R. Anderson
Clerk of the Public Utilities Commission
112 State Street
Montpelier, Vermont 05620-2701

Re: Case No. 23-2221-INV, Proceeding to Design the Potential Clean Heat Standard
Comments due January 19 on Default Delivery Agent Obligations, Responsibilities, Number, Geographic Scope
Topic tag 7, DDA Criteria

Dear Ms. Anderson:

Here are my comments on default delivery agent obligations, responsibilities, and number.

Commission's request

The Commission on December 11, 2023 requested comments on default delivery agent obligations, responsibilities, and number. The Commission requested comments addressing the possible number and geographic scope of default delivery agents, and a default delivery agent's obligations and responsibilities. The Commission also invited participants to identify topics or issues to be resolved and to propose agenda items for workshop discussion.

Number and geographic scope

The Commission requested comments on the optimal number and potential geographic scope of default delivery agent.

Optimal number of default delivery agents

There should be multiple default delivery agents. Statute authorizes and anticipates more than one default delivery agent, as the Commission pointed out in its December 12, 2023 order requesting these comments.

There are at least three reasons for designating multiple default delivery agents: market forces, the sheer number of measures that need to be installed, and that a default delivery agent only needs to provide a variety of clean heat measures, not all clean heat measure.

Market forces

Act 18 is built in part around market forces. Multiple default delivery agents will help to increase competition. That number should allow for an amount of competition while, hopefully, not being an unwieldy number for the Commission and the Department of Public Service. Multiple default delivery agents will also give the obligated parties some flexibility in choosing the default delivery agent that provides the best price for the measures that the obligated party is seeking.

Sheer number of thermal heat measures to be provided

There are so many measures that will need to be installed, that there will need to be more than one default delivery agent to install them all. I use "installed" intentionally.

Fuel switching to non-fossil alternatives is only a temporary measure on the way to meet the greenhouse gas emissions requirements of Act 153 (2020). I have pointed out in previous comments that renewable biodiesel,

for example, has a carbon intensity greater than 20. A carbon intensity of 20 is the maximum that will be allowed for thermal heat measures in 2050. (§ 8127(f)(1)(C)). Carbon intensity is not the goal. The goal is reduction of greenhouse gas emissions of 80% from 1990 levels.. Carbon intensities are one step in getting to the 80% reductions of greenhouse gas emissions.

There were some 260,000 housing units in Vermont in 2021. Many, probably most, of those units and buildings will need to have measures installed in the next 25 years. And many of the buildings being built to current standards will need to have measures installed before 2050. And that is only the residential buildings. There are also commercial and industrial buildings that will need to have measures installed.

Reducing carbon intensities of the thermal heat measures to 20 will not yield an 80% reduction of greenhouse gas emissions from 1990 levels. Population in Vermont has grown 14% between 1990 and 2020. It is unknown how much more growth there will be by 2050. If the rate from 2020 to 2050 is the same as from 1990 to 2020, then population in 2050 would be 30% larger than in 1990. Greenhouse gas emissions from the buildings before 1990 will need to be reduced by more than 85% to allow for all the new buildings between 1990 and 2050 to emit greenhouse gases at the rate the pre-1990 buildings will be modified to meet.

The buildings built between 1990 and 2025 will almost all need to have measures installed. The building standards even now are insufficient for a new building to meet the 2050 requirements for greenhouse gas emissions.

I foresee tens of thousands of measures installed annually in order to meet the required reductions of greenhouse gas emissions.

Scope of measures offered by default delivery agents

There are 12 eligible measures authorized by statute. It is likely that not every default delivery agent will offer to provide all 12 measures. It is also likely that some measures will not be feasible based on the amount of the per-credit fee.

I foresee multiple default delivery agents will be needed to deliver all categories of eligible measures.

Geographic scope of default delivery agent(s)

Statute requires that "The default delivery agent shall be one or more statewide entities capable of providing a variety of clean heat measures." The Commission quoted this provision in its request for comments. I suppose it is possible that more than one statewide entity can be designated while restricting them to serve only a portion of Vermont. So, the default delivery agent must be a statewide entity and the geographic scope would be the entire state.

One of the reasons for suggesting multiple default delivery agents is to achieve the market competition envisioned in Act 18 (2023). Giving default delivery agents a geographical monopoly negates the competitive nature envisioned by Act 18.

Recommendations

Allow multiple default delivery agents. Five might be a number that balances competitiveness with the administrative burden.

Have each default delivery agent serve the entire state.

Obligations and responsibilities

The Commission requested comments addressing

- reporting and information sharing,
- scope of work and budget building,
- required work areas,
- and other parts of the potential Clean Heat Standard program that would interact with these obligations and responsibilities of a default delivery agent.

Required work areas

The Commission requested comments addressing required program offerings of a DDA, with consideration to 30 V.S.A. §§ 8125(f) and (g), and how these statutory requirements guide a DDA's development and implementation of programs designed to serve these specific customer sectors. The Commission added statutes on use of non-compliance payments and on specific programs for five categories of buildings.

The purpose of default delivery agents is to "provide services that generate clean heat measures" (§ 8123(7)). A default delivery agent shall be a statewide entity "capable of providing a variety of clean heat measures". (§ 8125(b)). The only clean heat measures currently authorized are those listed in (§8127(d)). Other measures may be added later.

I foresee essentially every building, every process thermal load having to have installed measures in the next 25 years. And the most important is the top of the list in §8127(d): thermal energy efficiency improvements and weatherization. I foresee that if thermal energy efficiency improvements and weatherization are not done in every building, we'll never be able to meet the reduction of at least 80% of greenhouse gas emissions required by the end of 2049.

Conditions on providing thermal heat measures

A default delivery agent is obligated to annually provide all the credits it has been paid to provide, whether through the per-credit fee or the non-compliance payment.

Paying the per-credit fee to the default delivery agent does not automatically satisfy an obligated party's obligations under the thermal heat standard. (8125(a))

The default delivery agent shall deliver creditable thermal heat measures either directly or indirectly to end-use customer locations in Vermont. The default delivery agent may not buy credits on the market. (8125(d)(4))

The default delivery agent needs to create credits from all per-credit fees plus all noncompliance payments. (8125(d)(4))

When the default delivery agent provides measures with multi-year credits, all those credits from the out-year belong to the OP. (8125(d)(4))

I foresee that some of the 12 statutory clean heat measures might not advance the goals of Act 18. The technical advisory council and the emissions consultant might find that some substitute fuels emit too many greenhouse gases to meet the 2050 requirements. The Department of Public Service might find that some measures might not be "technically available".

Energy efficiency improvements and weatherization come first

The most important of the measures is the first in the statutory list: thermal energy efficiency improvements and weatherization. It should be the required go-to measure for a default delivery agent.

Energy loads need to be reduced first. Not doing so means that thermal energy will be wasted. It doesn't matter whether the energy being wasted is solar or biodiesel or wood or heating oil. Keeping energy use down means

fewer solar panels and fewer solar farms; more farmland for food because less for fuel; fewer trees cut down and less forestland cleared; fewer oil spills. And for all of them fewer mines and less material to produce all the equipment needed to create the wasted energy.

Only after energy loads are reduced as much as possible for a given building, should the default delivery agent offer other measures.

Specific customer sectors.

The statute requires a default delivery agent to create specific programs for five types of buildings, as noted by the Commission in its order.. Commercial and industrial buildings are lumped into one category in that statute.

Thermal process loads do not appear to be considered by the statute. Two thermal process loads are kiln drying of wood and heating of anaerobic digesters at wastewater treatment facilities.

The DEC's emissions inventory and forecast does not appear to consider thermal process loads.

Non-compliance payments

The statute provided by the Commission in its order requires that all non-compliance payments be used by the default delivery agent to provide services to customers with low income. (8125(f)) That raises questions.

Elsewhere statute requires that provision of measures to customers of low income and of moderate income be prioritized. (§8121 and §8124(d)(2))

Who owns credits from measures provided by non-compliance payments/ The default delivery agent delivers clean heat services on behalf of the OP (8125(b)). This holds true for credits from the per-credit fee. I suggest it should also be the case for non-compliance payments. The Commission has the ability to waive non-compliance payments and add the credits to a future year. Given that flexibility, the credits from the non-compliance payments could also belong to the obligated party.

Reporting and information

The Commission requested comments addressing reporting and information sharing requirements placed on a DDA, with consideration of 30 V.S.A. §§ 8125(d)(3) and (4), and how these sections shape the relationship and interactions between a DDA and Obligated Parties

A default delivery agent acts on behalf of an obligated part when the agent receives the per-credit fee from an obligated party.

Credit tracking system

I foresee a credit tracking system with multiple dimensions for each obligated party.

- One dimension is income level: low, moderate, or neither.
- Another dimension is status of credits: ordered, claimed, verified, retired
- The third dimensions is time: What is the first year in which each credit may be retired?
- The fourth dimension is the type of measure provided.

Records and information sharing

A default delivery agent will receive orders from obligated parties The order will be on a form created by the Commission. (8125(2))

The default delivery agent will need to keep records of all the thermal heat measures it provides for each obligated party. That is because the default delivery agent acts on behalf of the obligated party. And the default delivery agent will also need to share these records with the obligated party and the credit tracking system.

Scope of work and budget building

The Commission requested comments addressing the DDA scope of work and the budget building requirements placed on the DDA, with consideration of 30 V.S.A. §§ 8125(e)(1)(B) and (C), and (e)(2), and the interdependent elements of this planning process: (three-year plan, portion for promotion, uplift, workforce development, and trainings for measures); opportunities for public participation;)

DDA's may use the per-credit fees for market uplift, workforce development, and trainings without these activities earning credits of themselves. And the default delivery agent must provide the number of credits ordered by the obligated party.

Recommendations

Required work areas

Add the potential study to the Clean Heat Study page. The Clean Heat Study Page would have a brief description of the study (from section 81xx) with a link to the DPS's page(s) on the study.

Require each default delivery agent to provide thermal energy efficiency improvements and weatherization.

Require that thermal energy improvements and weatherization are the first measures to be provided by a default delivery agent at a given building

Define energy efficiency improvements as insulation, new doors and windows, heat exchange ventilation systems. There might be some more improvements to add to the list.

Require that thermal efficiency improvements and weatherization be installed before a default delivery agent offers other measures.

Require that thermal process loads be part of the program for commercial and industrial buildings.

Require that non-compliance payments fund 100% of measures for customers of low income, again starting with thermal energy efficiency improvements and weatherization..

Require that housing units of customers with low income that receive measures remain affordable for customers of low income for the duration of the longest measure received.

Assign initial ownership of credits created from non-compliance payments to the obligated party that made the payments.

Reporting and information

Require that the default delivery agent share the information needed by the tracking system with the obligated party and the other relevant entities. Those entities will be determined later during the development of the credit tracking and marketing system.

Other topics or issues

Participants are also invited to identify topics or issues to be resolved and to propose agenda items for workshop discussion.

The Commission encourages participants to expound on the roles, responsibilities, and obligations of DDA(s) in this potential Clean Heat Standard program. We note that separate requests for comment will be issued in due course regarding DDA evaluation criteria, eligibility, and compensation structure as well as the DDA request for proposals and appointment process pursuant to the schedule issued for case 23-2221-INV.

Enforcement

What happens if the default delivery agent fails to satisfy its obligations?

Act 18 covers enforcement against obligated parties that fail to retire the required number of credits. (8124 (f) Act 18 does not cover enforcement against the default delivery agent if it fails to provide the contracted measures. This also ties in with the statute that the default delivery agent is acting on behalf of the obligated party. (8124(f) and 8125(d)(2))

How does the shortfall affect obligated parties?

Recommendations

Raise the issue of enforcement at next week's workshop.

Other items for discussion at the workshop.

- What if the default delivery agent is based outside Vermont?
- If an obligated party has end use-customers, must the default delivery agent provide that obligated party's credits to that obligated party's end-use customers as a priority?

Recommendations are located in such sections throughout these comments.

I ask that you find that these recommendations have merit, and that you use them to shape the requirements for the default delivery agents

Sincerely,
Thomas Weiss, P. E.