

8.100 CLEAN HEAT STANDARD RULE

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PART I: GENERAL PROVISIONS

8.101 Purpose and Background

(a) The purpose of this rule is to implement the Clean Heat Standard (“CHS”), established under 30 V.S.A. chapter 94, which requires obligated parties to retire required amounts of clean heat credits to meet the thermal sector portion of the greenhouse gas emission reduction obligations of the Global Warming Solutions Act.

8.102 Authority

(a) This rule is adopted pursuant to 30 V.S.A. §§ 8122, 8125-8127, and 8131 and Section 6 of Act 18 of 2023.

(b) Pursuant to 30 V.S.A. § 8126(c), the Commission may revise this rule by order of the Commission without the revisions being subject to the rulemaking requirements of 3 V.S.A. chapter 25, provided the Commission complies with the requirements outlined in 30 V.S.A. § 8126(c)(1)-(5).

(c) Pursuant to 30 V.S.A. § 8124(f)(1), the Commission has the authority to enforce the requirements of this rule, including issuing penalties and injunctive relief.

8.103 Definitions

For purposes of this rule, the following definitions shall apply:

(1) “Annual compliance filing” means the documentation that an obligated party must submit to the Commission each year to verify satisfaction of the previous calendar year’s clean heat credit requirement.

(2) “Authorized agent” means a person or entity that has been assigned the ownership of the right to register an implemented clean heat measure instead of the initial owner. The authorized agent does not need to be the installer of the measure. To substantiate the authorization, the person or entity registering must submit an authorized agent form signed by the initial owner.

(3) “Banking” means carrying a clean heat credit from one compliance year to the next.

(4) “Carbon intensity value” means the amount of lifecycle greenhouse gas emissions per unit of energy of fuel expressed in grams of carbon dioxide equivalent per megajoule (gCO₂e/MJ).

(5) “CHS” means the Clean Heat Standard established under 30 V.S.A. § 8122.

(6) “Clean heat credit” means a tradeable, nontangible commodity representing the amount of greenhouse gas reduction attributable to a clean heat measure.

(7) “Clean Heat Credit Trading System” means a shared platform used to administer Vermont’s clean heat credit system.

(8) “Clean heat measure” means fuel delivered to and technologies installed for end-use customers in Vermont that reduce greenhouse gas emissions from the thermal sector. Clean heat measures shall not include switching from one fossil-fuel use to another fossil-fuel use. Clean heat measures are categorized as follows:

(A) “Installed” measures are:

- thermal energy efficiency improvements and weatherization;
- cold-climate air, ground source, and other heat pumps, including district, network, grid, microgrid, and building geothermal systems;
- heat pump water heaters;
- utility-controlled electric water heaters;
- solar hot water systems;
- electric appliances providing thermal end uses;
- advanced wood heating;
- the replacement of a manufactured home with a high-efficiency manufactured home and weatherization or other efficiency or electrification measures in manufactured homes; and
- other measures adopted by the Commission that are designated as an installed measure.

(B) “Delivered” measures are the supply of sustainably sourced biofuels and other measures adopted by the Commission that are designated as delivered measures.

(C) “Custom” measures are:

- noncombustion or renewable-energy-based district heating services;
- the supply of green hydrogen;
- line extensions that connect facilities with thermal loads to the electric grid; and
- other measures adopted by the Commission that are designated as a custom measure.

(9) “CO₂e” means carbon dioxide equivalent.

(10) “Commission” means the Public Utility Commission.

(11)“Compliance year” means the calendar year during which time an obligated party must fulfill its annual clean heat credit requirement.

(12)“Credit fulfillment plan” means the form that an obligated party files annually with the Commission, pursuant to 30 V.S.A. § 8125(d)(2), to indicate how it intends to meet its Commission-determined annual clean heat credit requirement for the next compliance year.

(13)“Credit status” means the state of a clean heat credit. The following statuses can apply to clean heat credits.

(A)“Potential” credits are credits expected to be generated by a clean heat measure that has been registered but has not yet been verified.

(B)“Active” credits are verified and eligible for banking and trading. Active credits are only eligible for retirement for measure years where the CO₂e savings have been realized. Active credits that are not yet eligible for retirement are referred to as “restricted active credits.”

(C)“Retired” credits are credits that have been retired to fulfill compliance obligations.

(14)“Customer” means a recipient of a clean heat measure. When a landlord is the recipient of a clean heat measure, the tenant(s) may be considered a customer for the purpose of determining the measure group.

(15)“Customer with low income” means a customer with a household income of up to 60% of the area or statewide median income, whichever is greater, as published annually by the U.S. Department of Housing and Urban Development, or a customer who qualifies for a government-sponsored, low-income energy subsidy.

(16)“Customer with moderate income” means a customer with a household income between 60% and 120% of the area or statewide median income, whichever is greater, as published annually by the U.S. Department of Housing and Urban Development.

(17)“Default delivery agent” means an entity designated by the Commission to provide services that generate clean heat measures.

(18)“Department” means the Vermont Department of Public Service.

(19)“Emissions Table” means a table of lifecycle emission rates for heating fuels and any fuel that is used in a clean heat measure, including electricity, or is itself a clean heat measure, including biofuels. As required by 30 V.S.A. § 8127(g)(1), the table must be based

on transparent, verifiable, and accurate emissions accounting adapting the Argonne National Laboratory GREET Model, Intergovernmental Panel on Climate Change (IPCC) modeling, or an alternative of comparable analytical rigor to fit the Vermont thermal sector context, and the requirements of 10 V.S.A. § 578(a)(2) and (3).

(20)“Energy burden” means the annual spending on thermal energy as a percentage of household income.

(21)“Entity” means any individual, trustee, agency, partnership, association, corporation, company, municipality, political subdivision, or any other form of organization.

(22)“ePUC” means the Commission’s online document-management system. ePUC includes public documents and other information in all kinds of cases filed with the Commission after 2017.

(23)“Fuel dealer” means an entity that sells heating fuel into or in Vermont that is required to register annually with the Commission, pursuant to 30 V.S.A. § 8124(b).

(24)“Fuel pathway” means a detailed description of all stages of fuel production and use for any particular fuel, including feedstock generation or extraction, production, transportation, distribution, and combustion of the fuel by the consumer. The fuel pathway is used in the calculation of the carbon intensity value and lifecycle greenhouse gas emissions of each fuel.

(25)“Heating fuel” means fossil-based heating fuel, including oil, propane, natural gas, coal, and kerosene, regardless of end use.

(26)“Measure attributes” means the CO₂e reduction resulting from the implementation of a clean heat measure before it is registered.

(27)“Measure group” means the qualifications of a clean heat measure pursuant to 30 V.S.A. Section 8124(d)(2). There are five measure groups:

(A) Group A: a measure that is a qualified capital investment implemented for a customer with low income.

(B) Group B: a measure that is a qualified capital investment implemented for a customer with moderate income.

(C) Group C: a measure that is not a qualified capital investment implemented for a customer with low income.

(D) Group D: a measure that is not a qualified capital investment implemented for a customer with moderate income.

(E) Group E: all other measures.

(28)“Obligated party” means:

(A) A regulated natural gas utility serving customers in Vermont.

(B) For other heating fuels, the entity that imports heating fuel for ultimate consumption within Vermont, or the entity that produces, refines, manufactures, or compounds heating fuel within Vermont for ultimate consumption within the state. For the purpose of this section, the entity that imports heating fuel is the entity that has ownership title to the heating fuel at the time it is brought into Vermont.

(29)“Qualified capital investment” means installed clean heat measures for customers with low or moderate income that require capital investments in homes, have measure lives of 10 years or more, and are estimated in advance by the Technical Advisory Group to lower annual energy bills, pursuant to 30 V.S.A. § 8124(d)(2). Examples include weatherization improvements and installation of heat pumps, heat pump water heaters, and advanced wood heating systems.

(30)“Technical Advisory Group” (“TAG”) means a Commission-appointed group that assists the Commission in the ongoing management of the CHS pursuant to 30 V.S.A. § 8128.

(31)“Technical Reference Manual” means a reference manual, established and maintained by the Commission in consultation with the Technical Advisory Group, that provides all necessary algorithms and default assumptions for estimating greenhouse gas emission reductions that result from the implementation of a clean heat measure.

(32)“Thermal sector” has the same meaning as the “Residential, Commercial, and Industrial Fuel Use” sector as used in the Vermont Greenhouse Gas Emissions Inventory and Forecast and does not include nonroad diesel or any other transportation or other fuel use categorized elsewhere in the Vermont Greenhouse Gas Emissions Inventory and Forecast.

(33)“Vermont Greenhouse Gas Emissions Inventory and Forecast” or “GHG Inventory” means a periodic and consistent inventory of greenhouse gas emissions prepared by the Agency of Natural Resources, pursuant to 10 V.S.A. § 582.

PART II: REGISTRATION, OBLIGATED PARTIES, AND COMPLIANCE PATHWAYS

8.104 Fuel Dealer Registration and Reporting Requirements

- (a) Each fuel dealer must register with the Commission. For any fuel dealer not registered on or before January 31, 2024, the first registration form shall be due 30 days after the first sale of heating fuel to a location in Vermont.
- (b) Each fuel dealer must report heating fuel data annually to the Commission by June 30.
- (c) Registration and reporting forms must be submitted online through a method prescribed by the Commission unless a registrant obtains permission from the Commission to file the registration in paper.
- (d) Documentation supporting the registration and reporting must be retained for seven years.
- (e) If a fuel dealer does not report for three consecutive years, that fuel dealer will be removed from the Commission's list of registered fuel dealers on its Clean Heat Standard website. A fuel dealer has to re-register if it resumes selling heating fuel into or in Vermont.

8.105 Determining Obligated Parties

Using the information provided in the fuel dealers' annual reporting, the Commission will determine whether a registered fuel dealer is an obligated party and the amount of its annual clean heat credit requirement for the next relevant compliance year.

8.106 Clean Heat Standard Compliance and Credit Fulfillment Plans

- (a) By order, and consistent with 30 V.S.A. § 8124, the Commission will establish the number of clean heat credits that each obligated party is required to retire each calendar year.
 - (1) Clean heat requirements transfer to entities that acquire an obligated party.
 - (2) Entities that cease to operate retain their clean heat requirement for their final year of operation.
- (b) An obligated party must meet its annual requirement through a designated default delivery agent appointed by the Commission unless the Commission grants the obligated party permission to meet its annual requirement, in whole or in part, through one or more of the following ways:
 - (1) by delivering eligible clean heat measures;
 - (2) by contracting for delivery of eligible clean heat measures; or
 - (3) through the market purchase of clean heat credits.

(c) An obligated party seeking Commission approval to meet its annual requirement using a method other than the default delivery agent must file a petition with the Commission that includes sufficient details on the obligated party's capacity and resources to achieve the emission reductions.

(d) By August 1 each year, an obligated party must file a credit fulfillment plan using the form in ePUC.

PART III: CLEAN HEAT MEASURES

8.107 Process for Approval of Clean Heat Measures

(a) This section establishes a process for approval of additional clean heat measures that are not listed in 30 V.S.A. § 8127(d).

(b) The Commission, in consultation with the TAG, administers the process for approval of additional clean heat measures.

(c) An obligated party, a default delivery agent, or the Department may propose potential clean heat measures to the TAG. If the TAG concludes that the measure is likely to meet the statutory definition of a clean heat measure, then the TAG will inform the Commission that the Commission's technical consultant should complete a measure characterization pursuant to 30 V.S.A. § 8128(c).

(d) A proponent of a new clean heat measure must provide sufficient information to support the TAG's consideration of whether the measure is likely to meet the statutory definition of a clean heat measure.

(e) An unapproved measure may be implemented before obtaining Commission approval as a clean heat measure. A measure cannot be registered or verified until it is an approved clean heat measure.

(f) For pipeline renewable natural gas and other renewably generated natural gas substitutes, an implementing entity must submit (1) documentation demonstrating that it purchased renewable natural gas and its associated renewable attributes and (2) a statement that it has secured a contractual pathway for the physical delivery of the gas from the point of injection into the pipeline to the obligated party's delivery system. This documentation must be filed with the measure registration.

8.108 Clean Heat Measure Group

(a) A clean heat credit is designated with the associated measure group.

(b) For Group A, B, C, or D clean heat measures, the person or entity registering the measure, as described in Section 8.111 of this rule, must file an attestation form signed by the customer that states that the customer meets the criteria as a customer with low income or a customer with moderate income. The attestation form is available on the Commission's website.

(c) For Group A or B, the person or entity registering the measure must indicate that the measure is being registered as a qualified capital investment, pursuant to 30 V.S.A. § 8124(d)(2).

PART IV: EMISSIONS ACCOUNTING

8.109 Updating the Emissions Table

(a) Every three years, the Commission will review and update the Emissions Table, pursuant to 30 V.S.A. § 8127(g). The triennial review process will include notice of any proposed changes, TAG review, and a 30-day public comment period.

(b) For changes to the Emissions Table that fall outside of the triennial review process, an obligated party must petition the Commission to recalculate a fuel's lifecycle emission rate, pursuant to 30 V.S.A. § 8127(g)(2) and (3). Such a petition must include:

(1) a request for the Commission to recalculate a particular fuel's lifecycle emission rate;
and

(2) an explanation of the basis for the recalculation, particularly if a fuel pathway is significantly impacted as a result of local, State, or federal legal requirements, technological change, or new evidence on emissions and supporting documentation.

PART V: CLEAN HEAT CREDITS

8.110 Carbon Equivalency of Clean Heat Credits

(a) One clean heat credit is equivalent to one metric ton of CO₂e.

(b) Clean heat credits must be based on lifecycle CO₂e emission reductions that result from the delivery of eligible clean heat measures to existing or new end-use customer locations into or in Vermont.

8.111 Registering and Tracking Clean Heat Credits

(a) Only an initial owner or the owner's authorized agent can register a clean heat measure. Measures can only be registered after the measure is implemented.

(b) To create a potential clean heat credit, the measure must be registered and the following information must be submitted:

(1) the location of the clean heat measure;

- (2) the associated measure group;
 - (3) the type of property where the clean heat measure was installed or sold (*e.g.*, single home, multi-family, manufactured home, commercial/industrial);
 - (4) the type of clean heat measure;
 - (5) information necessary to calculate the number of credits that the measure will generate; and
 - (6) any other information as required by the Commission.
- (c) For custom clean heat measures, where greenhouse gas emission reduction assumptions have not been established through the Technical Reference Manual or Emissions Table, an obligated party must maintain its documentation of all assumptions and calculations used to establish its greenhouse gas reduction claims.
- (d) Clean heat credits are awarded and time stamped using the date of verification.
- (e) Clean heat credits that are verified on or before December 31 are eligible for trading and retirement in the same compliance year; credits resulting from measures implemented and/or registered during a given compliance year but not verified before December 31 of that year may not be retired for that compliance year.
- (f) Pursuant to 30 V.S.A. § 8127(l), the principal mechanism for tracking and trading clean heat credits for the CHS shall be the Clean Heat Credit Trading System, or its successor.

8.112 Verifying Clean Heat Credits

The Department performs the verification of clean heat measures to convert a credit from potential to active. Verification applies to all clean heat credits associated with a measure.

8.113 Measure Attributes and Credit Ownership

(a) Initial ownership of clean heat measure attributes. Initial ownership of measure attributes is determined by the type of measure implemented.

(1) For installed measures, the individual or entity that owns the building in which the measure is being implemented is the initial owner of the measure attributes created by the implementation of that measure. However, if the measure is implemented at no cost to a participant under a program authorized by the Commission, the entity administering the program will be the initial owner of the measure attributes.

(2) For delivered measures, the entity delivering the clean heat measure is the initial owner of the measure attributes created by the implementation of that measure. For biodiesel blends above “B20” and other biofuels that have a reasonable risk of causing heating equipment

to malfunction, the entity delivering the measure must certify that the fuel customer's equipment is able to use the fuel effectively and safely. If the entity claiming the measure attributes cannot produce a record of the equipment being certified for the delivered biofuel as a clean heat measure, the fuel customer is the initial owner of the measure attributes created by the implementation of that measure.

(3) For custom measures, initial ownership of measure attributes must be determined by prior written agreement among the participating parties. The ownership arrangement is subject to review by the Commission upon petition of any of the participating parties.

(b) Transferring clean heat measure attributes. Pursuant to 30 V.S.A. § 8127(b), the owner or owners of a clean heat measure's attributes may transfer the measure attributes to an authorized agent once before the clean heat measure is registered. Measure attributes associated with a single clean heat measure cannot be divided; all measure attributes may only be transferred as a group to a single entity. The new owner of the transferred clean heat measure attributes must register the measure.

(c) Trading clean heat credits. Only active and restricted active clean heat credits may be traded. There is no limitation to the number of times a clean heat credit can be traded. Credits resulting from measures that have multi-year lives do not need to be traded together.

(d) At the discretion of the Commission, ownership of a significant proportion of Vermont's clean heat credits may trigger limitations on trading.

8.114 Demonstrating and Verifying Annual Compliance

(a) Obligated parties must fulfill their Clean Heat Standard obligations through ownership and retirement of clean heat credits in the Clean Heat Credit Trading System.

(b) Credit retirement is the process of permanently removing a clean heat credit from circulation in the marketplace and using it for compliance. Obligated parties may retire clean heat credits in a compliance year to meet their annual requirement. After a credit is retired, it cannot be reused or claimed by another entity.

(c) Pursuant to 30 V.S.A. § 8127(i), clean heat credits must be "time stamped" for the year in which the clean heat measure is verified and the future years for which carbon savings are realized for multi-year measures. A credit can only be retired in the year it is time stamped or later. Only clean heat credits that have not been retired shall be eligible to satisfy the current year obligation.

(d) Annual compliance verification. Pursuant to 30 V.S.A. § 8127(a), the Department must perform an annual verification of clean heat credit claims and submit the results of the verification and evaluation to the Commission.

(1) By June 30 of each year, obligated parties must submit an annual compliance filing with the Commission providing the information necessary to verify satisfaction of the previous calendar year's clean heat credit requirement or a request to waive non-compliance. An obligated party's annual compliance filing must include documentation demonstrating, either:

(A) For obligated parties using the DDA to fulfill some portion or all of their annual requirement, proof of adequate payment to the DDA; or

(B) For obligated parties fulfilling some portion or all of their annual requirement independent from the DDA:

(i) the clean heat credits that the obligated party has retired or is banking for use in future compliance periods;

(ii) the previously banked clean heat credits that the obligated party is using to satisfy its annual requirement for the compliance year;

(iii) the previously banked clean heat credits that the obligated party is retaining for use in future compliance periods;

(iv) for subdivisions (i) through (iii) of this subsection, the measure group, relevant credit identification numbers, and "time stamp" of the clean heat credits; and

(C) all other information required by the Commission, which must be included with the obligated party's annual compliance filing.

(2) By August 15 of each year, the Department must submit a report to the Commission. The report must include (1) the verified clean heat credits retired by each obligated party in the previous compliance year; (2) the verified clean heat credits banked by each obligated party; and (3) a response to any waiver requests.

(3) By September 15 of each year, obligated parties and other interested parties may file comments on the Department's report to the Commission.

(e) Following the submission of an obligated party's annual compliance filing and the Department's report, the Commission will determine whether each obligated party has met its annual requirement, and in the event it has not, determine the noncompliance payment to be paid to the default delivery agent, pursuant to 30 V.S.A. § 8124(f)(2). The Commission may provide an opportunity for an obligated party to file documentation of additional clean heat credits supporting a finding of compliance. Noncompliance payments must be paid to the default delivery agent within 30 days of a Commission order setting out the payment amount.

(f) Pursuant to 30 V.S.A. § 8124(f)(3), the Commission may waive the noncompliance payment required by 30 V.S.A. § 8124(f)(2) for an obligated party if the Commission finds that the

obligated party (i) made a good-faith effort to acquire the required amount of clean heat credits, and (ii) its failure resulted from market factors beyond its control. An obligated party seeking such a waiver must petition the Commission. The Commission may require that the obligated party submit evidence demonstrating satisfaction of the Section 8124(f)(3) criteria. If the Commission finds that the Section 8124(f)(3)(A) criteria have been met, then the Commission will direct the obligated party to add the number of credits deficient to one or more future years.

8.115 Banking Clean Heat Credits

(a) Pursuant to 30 V.S.A. § 8124(e), an obligated party may bank clean heat credits for future sale or application to the obligated party's annual requirements in future compliance periods, as determined by the Commission. An obligated party may elect to pay an alternative compliance payment in lieu of retiring clean heat credits.

(b) Non-obligated parties that own clean heat credits may also bank credits.

8.116 Disclosures and Representations Regarding Clean Heat Credits

(a) For clean heat measures, certain disclosures must be made to the end-use customer, homeowner, or building owner, as relevant, for the action to create clean heat credits.

(b) The Commission will keep a list of mandatory disclosures, including sample language, on its website.