

Recent Acts Affecting Anaerobic Digesters

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Issue

This report describes laws affecting anaerobic digesters enacted by the General Assembly within the last three years.

Summary

In general, anaerobic digester facilities use microorganisms to break down organic matter (e.g., food waste or animal manure) to produce a biogas that can be used as fuel to generate electricity or heat. The anaerobic digestion process also produces a byproduct (“digestate”) that can be used as fertilizer for crops, among other things. For additional details about anaerobic digestion, see the Energize CT [website](#).

Since 2017, Connecticut has passed two acts that may significantly affect the development of anaerobic digesters in the state: [PA 19-35 \(§§ 15-18\)](#) and [PA 17-218 \(§ 5\)](#). Among other things, these acts:

1. exempt certain anaerobic digestion facilities from a requirement to obtain a solid waste facility permit from the Department of Energy and Environmental Protection (DEEP);
2. establish a process in which the DEEP commissioner may direct the electric distribution companies (EDCs, i.e., Eversource and United Illuminating) to enter into long-term agreements to purchase power from anaerobic digestion facilities;
3. require the Public Utilities Regulatory Authority (PURA) to develop standards for interconnecting and injecting biogas into the state’s natural gas distribution system; and

4. increase the amount of virtual net metering credits available to agricultural customers with anaerobic digestion facilities.

Additional information about these acts is below. For further details, see the public act summaries available [here](#) and [here](#).

Two other acts passed since 2017 ([PA 17-144 \(§ 5\)](#) and [PA 18-50 \(§ 7\)](#)) may also affect anaerobic digesters, although less directly. The relevant portions of these acts are briefly summarized below. For further details, see the public act summaries available [here](#) and [here](#).

PA 19-35

Exemption from DEEP Permit Requirements (§§ 15 & 16)

The act exempts certain anaerobic digestion facilities from the requirement to obtain a DEEP permit to build and operate a solid waste facility.

To qualify for the exemption, a facility must be located with an animal feeding operation on land used for farming. In general, an “animal feeding operation” is a lot or facility on a farm that:

1. stables, confines and feeds, or maintains animals for at least 45 days per year and
2. does not sustain crops, vegetation, forage growth, or post-harvest residues over any portion of the lot or facility during the normal growing season.

In addition, a qualifying facility must fuel its anaerobic digestion process with at least 50% farm-generated organic waste from an animal feeding operation (e.g., animal bedding, manure) and not more than 5% from food scraps, food processing residuals, and soiled or unrecycled paper. The facility must use its liquid digestate as fertilizer and solid digestate for animal bedding, soil or soil amendment, fertilizer, or other value-added products.

An exempted facility’s animal feeding operation must annually report to DEEP the amount of (1) farm-generated organic waste that the facility processes and (2) waste processed from the collocated animal feeding operation and from other sources.

The act authorizes the agriculture commissioner to inspect the exempt anaerobic digestion facilities to ensure that they comply with the act’s requirements on how they must fuel the facilities. The commissioner must report non-compliant facilities to the DEEP commissioner. If DEEP determines that a facility is operating without a permit but is not collocated with an animal feeding operation or is processing more than 5% by volume food scraps, food-processing residuals, and soiled or

unrecyclable paper, the facility's operator must apply for a DEEP permit within five days. If DEEP denies the permit, the facility must close within five days.

EFFECTIVE DATE: Upon passage

Anaerobic Digestion Procurement (§ 17)

The act allows the DEEP commissioner, in consultation with other specified state officials, to conduct solicitations for energy derived from anaerobic digestion. Responding proposals must be from anaerobic digestion facilities that are animal feeding operations collocated on land used for farming. The commissioner may select proposals from resources with a combined generating capacity of up to 10 megawatts (MW) if she finds proposals to be:

1. in ratepayers' interest, including the delivered price;
2. consistent with the state's greenhouse gas reduction requirements; and
3. in accordance with policy goals outlined in the state's Comprehensive Energy Strategy and statewide solid waste management plan.

The commissioner may then direct the EDCs to enter into long-term agreements to purchase any combination of energy, capacity, and environmental attributes (e.g., renewable energy certificates (RECs)) from the facilities under the selected proposals. PURA must review and approve the resulting agreements.

The act requires EDCs to recover their net costs of the agreements through a fully reconciling component of electric rates for all customers. EDCs must credit customers for any net revenues from the sale of products purchased under the agreement in the same rate component.

EFFECTIVE DATE: Upon passage

Biogas Interconnection Standard (§ 18)

The act requires PURA to open a proceeding to define and adopt a gas quality interconnection standard for biogas derived from the decomposition of farm-generated organic waste or source-separated organic material processed through gas conditioning systems to remove impurities. The standard must ensure that the biogas is suitable for injection in the state's natural gas distribution system.

The proceeding must also address cleanliness standards for the biogas and a process for biogas producers to receive approval to interconnect to the state's natural gas distribution system. PURA must issue a final decision by September 1, 2021.

EFFECTIVE DATE: Upon passage

PA 17-218

Virtual Net Metering (§ 5)

The act requires PURA to authorize \$3 million per year in virtual net metering credits for agricultural customers with anaerobic digestion facilities. PURA must use at least half of the \$3 million for anaerobic digestion facilities (1) located on dairy farms that aim to use 100% of the manure generated on the farm and (2) that complement the farm's nutrient management plan. The act's credits are in addition to the credits already allocated to agricultural customers under the law's virtual net metering credit cap.

In general, virtual net metering allows EDC customers to (1) receive retail-rate billing credits for excess power they generate with a renewable energy facility and (2) share the credits with their other designated electric accounts. The law limits virtual net metering to agricultural, municipal, and state agency customers. It also caps the total amount of virtual net metering credits available each year. ([PA 19-35 \(§ 7\)](#) increases the annual cap from \$10 million to \$20 million.) The law further limits each eligible customer class (agricultural, municipal, and state) to 40% of the available credits.

PA 17-144 (§ 10)

In 2013, the legislature established a process (similar to the one established by [PA 19-35](#)) for the DEEP commissioner to procure power from Class I hydropower, landfill methane gas, or biomass resources. [PA 17-144 \(§ 10\)](#) expanded this procurement's scope to also allow for procuring power from Class I fuel cells, offshore wind, or anaerobic digestion facilities; energy storage systems; or any combination of them. The commissioner may procure up to 6% of the EDCs' load (i.e., demand), in total, through this procurement.

PA 18-50 (§ 7)

This act requires the EDCs, DEEP, and PURA to establish new tariff-based programs for EDCs to purchase energy and RECs from low-emission, zero-emission, and shared clean energy facilities. Anaerobic digesters may qualify as eligible low-emission projects under the new programs, as long as they also meet various criteria required by the act (e.g., under two MW in size, built after the

solicitation process required in the act). ([PA 19-35 \(§ 3\)](#) delays certain deadlines related to implementing these new programs.)

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