Program Description

In Connecticut, combined heat and power (CHP) market development is supported by the Distributed Generation (DG) Rebate Rider, hereafter referred to as the “DG Rider.” This incentive is aimed at natural gas customers in Connecticut with DG electrical loads. Its purpose is to improve the reliability of Connecticut’s power distribution system as a whole. The DG Rider can be applied to qualified systems, defined directly below.

For a system to be considered qualified (as per Public Act No. 05-1, “An Act Concerning Energy Independence”), it must have added electrical capacity on or after January 1, 2006, and be fueled by an approved natural gas fired customer-side distributed resource, defined as:

a. Operating at an electric capacity of 65 MW or less on the premises of a retail end-user with the transmission and distribution system including, but not limited to, fuel cells, photovoltaic (PV) systems, or small wind turbines, or

b. Reducing the demand of electricity on the premises of a retail end-user in the distribution system including, but not limited to, peak reduction systems and demand response systems.

If a CHP system falls under the above definition, the site can apply to enroll in this program. Enrollment in the DG Rider requires a three-party agreement between the electrical distribution company (EDC), the natural gas company, and the customer. Once an agreement has been accepted, a separate meter is attached to the qualified system in order to monitor gas usage. The customer is credited the appropriate dollar amount each month, according to the accepted agreement. Qualified charges that could potentially be credited are presented below.

Program Specifics

Connecticut EDCs, such as Eversource and United Illuminating Company, are required to offer the DG Rider to qualified systems, per Public Act No. 05-1. The natural gas company will credit the customer the applicable charge(s) each month depending on the negotiated three-party agreement; the natural gas company is then reimbursed by the EDC.

If the customer has natural gas service under a rate that includes firm service, the following charges that appear on the customer’s bill could potentially qualify to be removed or discounted through the DG Rider (if applicable):

1) Customer Service Charge
2) Daily Demand Meter Charge
3) Delivery Charge per hundred cubic feet (ccf)
4) Demand Charge
5) Gas System Improvement Charge

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2 As defined in Connecticut General Statute 16-1(a)(23).
6) Other delivery-related charges or credits negotiated through the three-party agreement

If the customer is under a rate that includes interruptible service, the delivery charge per ccf is negotiated between the natural gas company and the customer. This delivery charge, in addition to the daily demand meter charge and customer service charge, are rebated each month when the bill is rendered. The conservation adjustment mechanism (CAM) charge, the funding mechanism for the state’s Conservation and Load Management Plan, is not eligible for rebate under firm or interruptible service.

The DG Rider will continue under Public Act 05-01 as long as it is required by legislation, or until it is modified, repealed, or disallowed by the Connecticut Public Utilities Regulatory Authority.

Example of Program Outcome

In the early months of 2019, the Town of New Canaan, Connecticut, working with MHR Development, reached out to the New England CHP Technical Assistance Partnership (CHP TAP) for help determining the feasibility of CHP at various municipal buildings throughout the town, including the Public Works Complex. The complex consists primarily of a heated parking garage, a wastewater treatment facility, and a transfer station.

In May 2021, the Town of New Canaan contracted Dalkia Aegis to install and commission a 70 kW CHP system at the Public Works Complex, adding on-site capacity to the existing 127 kW direct current (DC) solar PV system. The 70 kW CHP system, comprised of two 35 kW Yanmar reciprocating engines and heat recovery, is fueled by natural gas and meets the requirements for a qualified system under the DG Rider. The CHP system has already provided many benefits to the Public Works Complex and the Town of New Canaan including, but not limited to:

- 70 kW of dispatchable power to support baseload power needs and provide space heating for the Public Works Complex
- Reduced oil consumption
- A monthly rebate of approximately 36% on the complex’s natural gas bill through the DG Rider

New Canaan has also benefited, as installation of the natural-gas-fueled CHP system incentivized the gas company to extend the pipeline to the Complex, increasing resilience and power reliability for the town. With this pipeline extension, New Canaan—with the assistance of MHR Development and the New England CHP TAP—is looking into CHP feasibility at multiple locations across the town. The DG Rider will be one of the keys to attaining economic success for these projects.

For More Information

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More CHP Policy Profiles:
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More information on the DG Rider can be found on individual natural gas company websites:
Eversource: https://www.eversource.com
Connecticut Natural Gas Corporation: https://www.cngcorp.com
Southern Connecticut Gas Company: https://www.soconngas.com

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