



STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC UTILITY CONTROL

THE ENERGY & TECHNOLOGY COMMITTEE

Senate Bill 1141: VIRTUAL NET METERING

March 8, 2011

TESTIMONY OF The Department of Public Utility Control

The Department thanks the Committee for this opportunity to testify on Senate Bill 1141. Senate Bill 1141 requires Connecticut Light & Power (CL&P) and United Illuminating (UI) to allow for the 'virtual' net metering of electricity from Class I renewable sources. As defined in this proposed legislation, "virtual net metering" means that any electricity produced from a Class I renewable source would be used to offset the metered consumption of the customer who owns the Class I resource as well as the electricity used at other metered accounts, including the accounts of other customers, within the same service territory. This legislation would expand net energy billing to encourage the installation of Class I renewable facilities by providing a revenue stream, at the full retail electric rate, for the surplus electricity produced by that facility.

The Department strongly concurs that the current statutory construction relating to net metering requires modification if the underlying legislative intent is to be realized. However, the proposal would result in a level of subsidies that may be greater than are necessary to achieve the intent of this bill. These costs would be collected from all ratepayers, putting additional upward pressure on Connecticut's electric rates. The Department does offer several suggestions that could dramatically further the goals of virtual net metering while mitigating any adverse ratepayer impacts.

The current residential retail Standard Service energy rate for CL&P, the generation portion of an electric bill, is about 9.5¢/kWh. However, as noted above, reimbursement under the current net energy billing structure allows the customer to offset their electric bill at the full retail rate for each kWh they produce. The full retail rate, which is currently around 17.5¢/kWh for CL&P residential customers, recovers distribution and transmission rates, federally mandated charges, the CTA, and societal costs (e.g., uncollectible revenues). These costs, which are not avoided, must be shifted to the remaining customers through rates. In addition, the Class I customer generator can sell their renewable energy credits (RECS). For Class I projects such as wind, solar and fuel cells these RECS sell for as much as 5.5¢/kWh. Combined, these amounts result in a subsidy of about 13.5¢/kWh.

When a customer produces more power than they consume over the annualized Class I banking period, they are reimbursed for the surplus at the avoided cost. Currently the avoided cost is defined as the ISO-NE wholesale energy rate and under this structure customers are paid between 4¢ and 7¢/kWh for the surplus.

To encourage the installation of Class I renewable resources, and as part of Connecticut's rapidly evolving energy policies, the rules governing net metering were expanded in 2008.¹ Under the revised standards the electricity generated by a customer owned Class I generator is netted against the electricity the customer purchases from the electric company to determine whether the customer *purchased* more than they produced or *produced* more than they purchased. Any electricity that is generated reduces the customer's bill, *at the metered location (i.e., a specific meter) that measures the output of the generator*, at the full retail electric rate for that customer. The full retail rate includes all delivery and generation related costs. Surplus electricity can then be 'banked' and used to offset future electric use at that metered account. The customer is paid an average *wholesale price* for any banked electricity that is not used at the end of an annualized period. To date the electric distribution companies have defined 'customer' as *the metered account (i.e., single meter) that measures the output of the generator* and have only allowed the netting of consumption against that meter. Senate Bill 1141 greatly expands the subsidy to renewable generators by allowing additional, unrelated metered accounts to net their consumption against the electricity produced by a renewable generator. While this encourages the construction of larger generators (to assure that the customer is generating surplus production), it increases the subsidy. Rather than being paid 4¢ to 7¢/kWh for the unused surplus electricity the customer will be paid 17.5¢/kWh.

The Department supports the goal of encouraging the installation of renewable resources and believes that modifications to the current statute can accomplish this goal, simplify the administration of this program and limit additional subsidies. In addition, these changes could also be considered to encourage the installation of smaller (e.g., up to 2 MW) non-Class I distributed resources without creating additional subsidies for these resources as well. The Department asks for the Committees' consideration of the following recommendations:

- Define customer as the person, entity, municipality, etc., responsible for payment of a metered electric account(s). Examples include municipal accounts (schools, offices, streetlights), franchised restaurants operated by the same franchisee, national big box stores, etc. This would represent a large expansion of the current definition of a "customer" thereby encouraging a significant number of new opportunities for customers.
- Allow the customer to apply net energy against the *generation portion* of the customer's metered accounts(s) within the same EDC service territory. This allows the customer to avoid the Standard Service or Supplier cost of generation at multiple meters, a value that is greater than the wholesale price of generation. Since the cost of Standard Service generation is a pass through for the EDCs, no subsidy is created.

¹ The revised net metering rules authorized under Public Act 07-242 were implemented in early 2008.

- Require the EDCs to bill net metering customers in the same meter cycle. While this may require the EDCs to modify their billing systems, it would simplify the administration of the program by assigning net production within the same meter reading cycle in which the energy is produced. Synchronizing meter readings from multiple locations is an ideal use for advanced meters. The Department believes that larger installations (e.g., fuel cells installed by a municipality or in commercial buildings with multiple meters) may be able to assign all of their monthly net production to multiple customer metered accounts within each billing period, avoiding the need to bank any kWhs. Residential solar and other small installations that may not be responsible for the electric bill at other metered locations would simply operate under the current structure, banking monthly net production, offsetting future electric bills and getting reimbursed at the end of the annual banking period. However, annual banked kWhs will be reimbursed at retail instead of wholesale generation rates.
- Develop a rate to recover the administrative cost of this program and roll this cost into the monthly customer charge, thereby developing separate monthly charges, a traditional customer charge and a net metering charge, for each tariff.
- Have the Department examine the amount necessary to support various Class I technologies (solar, wind, etc.) and installations (grid side merchant projects vs. customer side of the meter projects) and establish feed in tariffs to provide each installation the revenues (the proper rate) to support each. This is intended to avoid an unnecessarily rich incentive for any one technology.

If the Committee moves forward with Senate Bill 1141 in its current form the Department requests the following clarifications:

- The Bill states “at the end of each calendar year, the electric distribution company shall compensate the customer host for any unassigned virtual net metering credits at her retail rate of electric power generation.” The Department interprets this to mean the otherwise applicable retail generation service charge rate paid by the customer host. However, the Department seeks clarification as to whether the customer host is to be reimbursed for banked kWhs at the generation service charge rate that is effective at the end of the calendar year (December 31st) or at an annual average generation service charge rate. If it is an annual average, is it the customer’s load weighted average or simple arithmetic average?
- Also, it appears that the customer host can offset the electric consumption, and therefore the electric bill, of up to five (5) beneficial accounts. Each beneficial account therefore would not pay the full retail cost of any energy-based charges that are offset. The Bill however is silent as to how the customer host and the distribution company are reimbursed for these transactions.

The Department thanks the Committee for this opportunity to testify and looks forward to working with it on this issue.