ProRate Energy moves the merging of the Community Solar UD-18-03, Reliability UD-17-04 & Resilience UD-21-03 Dockets

ProRate Energy (PRE) moves to request the Council to merge these three dockets.

Whereas PRE asserts that both behind the meter batteries (BTMB) and the Adoption of ProRate on an Opt-in basis (APOI) benefits all three dockets and but provides these benefits more easily and with better benefit/cost ratios via a combined docket.

Whereas each are active dockets.

Whereas each will reach higher goals and/or at less cost with BTMB.

Whereas many of these dockets are constrained to only consider a small subset of these issues and/or stuck with the wrong procedure to find and fully examine these issues.

Whereas in two very recently approved resolutions of the utility committee, the Council has incorrectly asserted that ProRate does not belong in the resilience docket because it only good for Demand Response and cannot provide any of the following benefits. But in fact, ProRate provides Load Flexibility which, according to the Brattle Group, is far superior to Demand Response and quite appropriate to UD-21-03.¹

How does the Community Solar (CS) docket greatly benefit from behind the meter batteries and the Adoption of ProRate on an Opt-in basis? To best understand the problem and its solution, consider a 10KW solar array placed on a roof that faces SE. And recognize that if that roof of the home instead faced SW, it would consistently, i.e., nearly every day in the summer, produce electricity with much higher wholesale value and often during CLEP, a.k.a., ProRate's Near Peak Demand Hours. Even though it would not produce more kWhs. How can we get that value?

- 1. PRE asserts that it is better for the solar industry and harms no customers if solar kWh production is remunerated using CLEP5 and CLEPm (see Glossary) instead of how it is done now: Currently, NOLA's CS rules, as adopted, only pay for solar in a weighted-average and time-independent way.
- 2. Installing, roughly a 20-kWh battery could store kWhs generated between 9 am and noon from a SE facing roof and release it to the grid after 3 PM. In this way, the home's roof is "virtually" rotated.
- 3. Each kWh's value would be increased by roughly 50 to 1000%.
- 4. This approach pays for batteries, speeds up repayment of rooftop solar investments, and
- 5. Creates Sustainable microgrids.

¹ "Demand response is reaching a saturation point, but load flexibility is emerging as its new iteration, a 2.0 that is much more powerful and could become a 200 GW grid resource for the U.S. by 2030. That's the word from the Brattle Group, in a <u>report</u>, "The National Potential for Load Flexibility: Value and Market Potential through 2030." ...

[&]quot;Load flexibility can add to what demand response already provides, yielding higher value at a lower cost. It provides frequency regulation, distribution-level capacity, and other grid services. Able to aid the grid in a geographically targeted way, it lowers demand to avert the need to build new infrastructure. Load flexibility also offers an additional resource as electric vehicles increase demand on the grid. And because power plants need not operate as much when load flexibility is in play, it also helps cut the use of fossil fuels, so is a powerful way to decarbonize, according to the report." https://microgridknowledge.com/load-flexibility-demand-response/

How does the Reliability docket greatly benefit from behind the meter batteries and the Adoption of ProRate on an Opt-in basis? To best understand the problem and its solution, consider that the Council's motion on the table is to set a low standard for grid reliability, namely only better than the worst 25% of all utilities in the number of outages and their duration. PRE endorses that approach even though just a little worst performance in 2016 and 2017 allowed over 2000 outages a year and not too infrequent, multi-hour outages that threatened small businesses and restaurants. A 10-kWh battery will protect the average home from over 90% of such outages. However, a small restaurant may need one 10x as big. BTMB clearly provides a major reliability boost. But what will pay for the battery? ProRate pays for batteries out of ENO bill savings. Therefore, to acquires a BTMB may require APOI.

How does the Resilience docket benefit from behind the meter batteries and the Adoption of **ProRate on an Opt-in basis ?** Note that both CS and the Reliability docket benefit from BTMB combined with APOI. However, in both cases, this fully pays for thousands of sustainable microgrids.

What else do you get from a combined docket?

- A. In the CS docket, Madison Energy Investments is requesting/requiring that ENO provide on-bill credits in the way just like what is already the industry standard in most states.
- B. The NOLA CS ordinance already states that Community Solar Generators can be as small as a few solar panels, (as long as, each subscriber is allocated at least as many kW's found on a single panel and there are at least 3 subscribers to each Community Solar Generators). If both happen, it would allow:
- 1. A pair of customers to jointly own/share a sustainable microgrid where one has the battery system and the other rooftop solar.
- 2. Rooftop Solar Customers who have already almost maxed out the economic value of their solar array can reinvigorate the investment by instead: installing more efficient appliances and thereby free up excess capacity. They can do this by renting their excess financial output to a neighbor at \$.80 on a \$1 of received value. New KWs of solar power can effectively be purchased at the price of upgrading to more efficient lightbulbs.
- 3. This helps boost the value of the ProRate option, i.e., **APOI**, because this would allow such customers to really have negative bills.
- 4. The value proposition is not fundamentally about or solely about Solar power, it can also be about Community Batteries... using the same dockets.

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NOLA

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Glossary

Understanding CLEP must begin with understanding how electricity is sold before CLEP is adopted.

1. The price a customer pays for a kWh = *Cost of Energy* PLUS *Cost of Service* where

- a. *Cost of Energy* is the average wholesale electricity price of the current month.
- b. *Cost of Service* depends upon customer class, e.g., residential *Cost of Service* is around 8¢/kWh while the *cost of service* for small commercial is around 6¢/kWh.

2. Except for residential, all customers also pay a demand charge often near \$10/KW, for the largest demand in any 15 minutes of that month; this refers to the speed energy is consumed.

A very simple explanation of the CLEP rate design is:

1. CLEP customers buy kWhs at the constant price described in the small commercial rate in ENO's rate schedule except do not pay demand charges.

2. However, CLEP customers also get two extra cash flows: CLEP5 and CLEPm.

3. These are bi-directional, i.e., for purchases and sales, meaning a customer will pay ENO both CLEP5 and CLEPm when a kWh is purchased, and ENO will pay these to the customer when a kWh is sold.

4. CLEP5 = the current wholesale electricity price MINUS the cost of energy, when a kWh is purchased from ENO; otherwise, CLEP5 = the current wholesale electricity price.

5. CLEPm = 50 e/kWh during the 500 hours nearest to the utility's annual Near Peak Demand Hours, otherwise CLEPm is zero; in this way, CLEPm replaces the demand charge.

6. CLEP customers get net bills every month, i.e., if CLEP5 PLUS CLEPm is big enough, ENO pays the customer the net bill that month; thus, unlike Net Energy Metering there is \$0 to carryover to future months.

For more information, please visit <u>https://www.change.org/EngageTheMarketToSlowClimateChange</u>