

AARP MAINE: DISTRIBUTED GENERATION STAKEHOLDERS GROUP

BARBARA R.ALEXANDER

NOVEMBER 4, 2021

CONSULTANT TO AARP MAINE



PURPOSES OF THE DG STAKEHOLDER GROUP REPORTS

- Advise and support the development of a cost-effective successor program to foster the continued development of distributed generation in Maine following the conclusion of the net energy billing program in 2023;
- Advise on the evaluation of the net energy program, with a focus on applying lessons learned to inform the contributions of its successor program toward state policy objectives;
- Identify necessary resources to achieve the preceding objectives as needed.

SOME RELEVANT BACKGROUND THAT SHOULD BE TAKEN INTO CONSIDERATION

- Maine adopted restructuring and prohibits our two investor-owned utilities from owning or managing generation resources. All previously Maine owned generation was sold to owners, many of whom are national players in the wholesale markets.
 - The generation part of our bill is the Standard Offer awarded via competitive bids by the PUC and billed and collected by CMP and Versant. The current Standard Offer price for CMP residential customers is about 6.5 Cents/kWh
- The T equals Transmission on your bill and those charges are passed through from ISO New England/FERC.
 - These federal transmission charges have increased significantly and now average 2-3 cents/ kWh on our CMP bill.
- The Distribution service is regulated by the Maine PUC: billing, customer care, poles, wires, substations, reliability and grid investments, storm restoration, and legislatively mandated subsidies or pass through of expenses: Efficiency Maine; Net Energy Billing subsidies; certain renewable energy contracts; offshore wind demonstration contracts; Low Income Assistance Program.
 - The current CMP distribution charges directly regulated by the Maine PUC are about 5-6 cents per kWh.

WHAT IS FULL RETAIL RATE NET ENERGY BILLING?

- NEB is a policy that allows those who generate solar on their roof or through purchasing a community solar share to offset generation with a full retail rate kWh, that is, offsetting solar generation with the standard offer, the federal transmission charges, and the regulated distribution charges and social purpose programs included in those charges. The only exception in Maine is the fixed monthly customer charge. The customer is treated as having avoided all the generation, transmission, and distribution costs when in fact many of these costs are not avoided.
- The expansion of the community solar programs in the 2019 Legislation enshrined this policy in this program that greatly expanded the scope and scale of such systems. Maine has become the epi center for these projects due to this generous policy.
- Ratemaking implications: Using the full retail rate as a mechanism to expand these programs does not avoid all the transmission and distribution costs. As a result, our rates must include these lost revenues to meet the distribution services and costs approved by the PUC.
- The PUC passes through these costs in rate cases or annual rate adjustments. Since electricity rates are regressive in terms of their impact on household income, the lower income and fixed income customers bear a higher burden compared to higher income customers.

MAINE PUC FINDINGS

- The PUC reported to the Legislature in November 2020 that these NEB programs and resulting subsidies will have a significant impact on CMP and Versant customer bills. Every community solar project or individual rooftop solar system that is approved under full retail rate NEB will shift costs to ratepayers for their 20-year contracts. While there are legitimate arguments about the longer-term societal benefits of solar projects, there is no dispute that rates will significantly increase based on the current NEB policy. According to the Commission's report, the rate increase is approximately \$15 million for every 100 MW of solar acquired under these NEB contracts. Under the 750 MW cap enacted in L.D. 936, this equates to a \$112 million or 15% rate increase ANNUALLY.
- We can obtain the carbon reduction and societal and health benefits from solar obtained through competitively bid fixed price contracts for 3-4 cents per kWh as documented by recent PUC approved contracts.
- According to the PUC, the savings being offered to community solar customers will end up raising rates in excess of these savings even for participating customers.

WHAT ARE DISTRIBUTED GENERATION BENEFITS COMPARED TO OTHER RENEWABLE ENERGY POLICIES?

- Distributed generation refers to small scale generation scattered throughout the distribution system, usually by means of rooftop solar and community solar systems.
- The electrons produced by these DG systems have the same attributes in the generation system as larger scale and cheaper solar farms.
- What actual benefits exist for relying on NEB to achieve transmission and distribution system benefits? That question has not yet been answered in Maine. No formal evidentiary proceeding has documented whether or how DG in Maine has reduced or will reduce CMP or Versant's distribution service costs either in the short term or long term.

HOW WOULD WE DETERMINE DISTRIBUTION SERVICE BENEFITS?

- DG is not an end in itself. It may be a valuable part of an integrated distribution and transmission grid once the costs and benefits of various portfolio options to achieve our clean energy goals is developed, considered in a formal proceeding, and approved by the PUC. The key questions:
 - Do these systems avoid the need for issuing bills? Relying on the call center or handling payment issues, collection issues, or handling customer complaints?
 - Do these systems reduce the costs for hardening the grid to avoid storm related outages? Or avoid storm related restoration costs?
 - Do these systems avoid the need for distribution service upgrades to meet new growth and development or increased use of electricity due to EVs and electrification of home heating? What if electrification growth does not occur as predicted?
 - Are these projects required to be located to provide distribution reliability benefits? Currently, that is not the case.
 - How do the projected long term benefit estimates compare to short term actual rate increases? Who bears the risks and rewards? Is the full retail rate NEB policy socially just and equitable compared to other investments that might achieve the same benefits?

WHY ISN'T NEB THE SAME AS PAYING FOR EFFICIENCY PROGRAMS?

- Efficiency programs are developed with cost causation and cost responsibility in mind. The budget and bill impacts are approved by the PUC.
- Unlike NEB, efficiency programs do not reflect 20-year contracts.
- Efficiency programs are routinely evaluated by independent third parties subject to evidentiary hearings and analysis by stakeholders and approved by the PUC. Program changes are routinely adopted to reflect these fact-based reports.
- The Efficiency program benefits are controlled by Efficiency Maine and bid into the wholesale market and those revenues are used to fund our programs.

AARP POLICIES AND RECOMMENDATIONS

- Essential energy services, particularly electricity, should be affordable and programs should be funded to help the lowest income customers maintain these services. For Electrification to be successful, customers should experience affordable electric bills.
- Full retail rate NEB should be reformed to reflect the market value of solar and documented avoided distribution costs. The evaluation of NEB and documentation of costs and benefits should be treated the same as our efficiency programs.
- DG policy should require projects to be sited where there is the potential for distribution service savings or at least to avoid unnecessary interconnection distribution investments.
- Finally, our future generation supply portfolio in Maine should reflect a diverse portfolio that does not “put all our eggs into one basket.” The historical evidence reflects too many incidents of the risks of not following this policy.