Overview

JOE-4-SUN Falmouth is operated by Citizens Energy Corporation (Citizens), serving customers in the Eversource utility service territory. The project is located in Falmouth, Massachusetts, on the site of a reclaimed landfill. Starting operations in February 2021, 50% of the power generated by Phase II of the project is allocated to low-income ratepayers.

Citizens manages the program through JOE-4-SUN, a low-income community-shared solar program launched by former U.S. Representative Joseph P. Kennedy II, the founder and chairman of Citizens Energy, which offers solar energy at a deep discount to families in need. Subscribers receive energy credits produced by ground-mounted, utility-scale solar arrays, as well as discounted energy rates. The program is implemented under the Solar Massachusetts Renewable Target (SMART) initiative.

The JOE-4-SUN model eliminates common barriers to accessing solar power such as home ownership, upfront fees, installations, or credit checks. Customers who would not otherwise be able to opt for solar power on their own can buy into an existing installation.
Innovative Approaches

- **Access for LMI households.** The JOE-4-SUN program in Falmouth is available only to Eversource customers. Low-income ratepayers must demonstrate either a residential assistance discount rate or a service address in a Massachusetts Environmental Justice Zone. Subscribers receive a discounted rate for electricity (roughly 25%), as well as bill credits doled out by the utility, implemented via a “double billing” system. Subscribers must reconfirm income eligibility annually to remain in the program. Applicants to the program are kept on a waiting list, and are rotated in bi-annually. An example National Grid bill is shown below.

- **Landfill to greenfield.** The Falmouth Economic Development and Industrial Corporation, the primary municipal agency responsible for creating jobs and promoting economic development, recognized the benefits of a solar installation on the city’s landfill. After a feasibility study and rezoning, Citizens, a developer specializing in solar installations on landfill, was selected for the project.

- **Add-on to existing community solar provided LMI benefits.** Phase II of the project, which serves LMI households, was an add-on to Phase I. This approach could be replicated at other community solar projects to expand access to clean, renewable energy.

- **Needed infrastructure provided.** As a non-profit, Citizens invests in and provides the infrastructure needed to execute on subscriber management: call teams, payment systems, and subscriber recruitment.
Lessons Learned

- The billing protocol (described as “double billing”), mandated by the SMART program, is confusing to subscribers. A coalition of advocates in Massachusetts and New York are working to improve their respective state programs by implementing consolidated (or unified) billing.

- The project is expected to return approximately $14 million in economic benefits to the Town of Falmouth via energy savings, lease payments, and payments in lieu of taxes. These benefits are a win-win for the Town and its residents.

- The project was financed by Citizens’ capital (equity), debt, and tax equity. When a partner is a utility, the risk is low and banks are willing to loan money.

BEST PRACTICES

- Non-Financial Best Practices:
  - Landfill to greenfield
  - Municipal financial benefits

This case study is a part of the LIFT Toolkit initiative. To explore more case studies and best practices visit LIFT.Groundswell.org research@groundswell.org
Example National Grid Bill

This billing protocol (described as “double billing”) is mandated by the SMART program.

THIS IS A SAMPLE BILL, YOUR NATIONAL GRID BILL MAY LOOK DIFFERENT.

YOUR MONTHLY CREDIT FROM JOE-4-SUN APPEARS AS TRANSFERRED AOB CREDIT UNDER THE HEADING “OTHER CHARGES/ADJUSTMENTS”.

PAGE 1

ACCOUNT BALANCE
Previous Balance 100.00
Payment Received on Jul 10 -100.00
Balance Forward 0.00
Current Charges +54.82
Amount Due $54.82

Payment concerns? We are here to help. To learn about solutions to help you take control of your energy use and bills, visit www.ngrid.com/billhelp.

Go paperless! Electronic billing and payments make managing your monthly bill easier. Save time, money, and natural resources: www.ngrid.com/paperless.

DETAIL OF CURRENT CHARGES

Delivery Services
Service period: Jun 7 - Jul 5

<table>
<thead>
<tr>
<th>No. of days</th>
<th>Current Reading</th>
<th>Previous Reading</th>
<th>Total Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>41991 Actual</td>
<td>41076 Actual</td>
<td>315 kWh</td>
</tr>
</tbody>
</table>

METER NUMBER 00000000 NEXT SCHEDULED READ DATE ON OR ABOUT Aug 9

RATE Residential Low Income R-2

Customer Charge 15.09
Dist Chg 20.00
Transmission Charge -0.59
Transmission Charge 8.59
Energy Efficiency Chg 1.09
Renewable Energy Chg 0.20
Distributed Solar Charge 0.89
Low Income Discount 20.09

Total Delivery Services $23.96

Keep this portion for your records. Return this portion with your payment.

ACCOUNT NUMBER 00000-00000 PLEASE PAY BY July 29, 2020 AMOUNT DUE $54.82

ENTER AMOUNT ENCLODED

Write account number on check and make payable to National Grid. Please pay Gas & Electric bills separately.
Supply Services

<table>
<thead>
<tr>
<th>Supplier</th>
<th>National Grid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Service Fixed</td>
<td>75.00</td>
</tr>
<tr>
<td>Total Supply Services</td>
<td>$ 75.09</td>
</tr>
</tbody>
</table>

Other Charges/Adjustments

- Transferred AOB Credit: $ -46.18
- Total Other Charges/Adjustments: $ 46.18

Explanation of General Billing Terms

- kWH: Kilowatt-hour, a basic unit of electricity used.
- Off-Peak: Period of time when the need or demand for electricity on the Company's system is low, such as late evenings, weekends and holidays.
- Peak: Period of time when the need or demand for electricity on the Company's system is high, normally during the day, Monday through Friday, excluding holidays.
- Estimated Bill: A bill which is calculated based on your typical monthly usage rather than an actual meter reading. It is usually rendered when we are unable to read your meter.
- Meter Failure: A meter by which the usage on certain meters may be multiplied to obtain the total usage.
- Demand Charge: The cost of providing electric transmission and distribution equipment to accommodate your largest electrical load.
- Supplier Service Charges: Charges related to the services provided by the supplier.
- Delivery Service Charges: Charges related to the services provided by the supplier.
- Customer Charge: The cost of providing customer-related services such as metering, meter reading and billing.

Distribution Charge: The cost of delivering electricity from the beginning of the Company's distribution system to your home or business.

Transition Charge: Company payments to its wholesale supplier for transitioning the wholesale arrangements.

Transmission Charge: The cost of delivering electricity from the generation company to the beginning of the Company's distribution system.

Energy Efficiency Charge: The cost of energy efficiency programs provided by the Company.

Renewable Energy Charge: A charge to fund initiatives for communicating the benefits of renewable energy and reducing the growth rates and duration of renewable energy and retail electricity.

Distributed Solar Charge: Recovered the cost of the Massachusetts solar program, including payments to owners of solar systems.

Notice About Electronic Bill Statement

By signing your contract, you agree to receive all necessary information via email. You can ask for a paper copy at any time. If you have any questions, please contact us at 1-800-323-0373.

Department of Public Utilities (DPU) regulations provide that a company may not terminate electric service for failure to pay any period or at a time when a customer complaint or appeal is pending.

Arrangement Management Program (AMP)

AMP provides assistance to income-qualified residential customers. Participants must agree to stay current with monthly Budget Billing payments. For complete details and an application, visit www.nationsgrid.com or call the number on the bill.

Questions?

If you have questions or complaints regarding this bill, National Grid's service quality, please contact Customer Service at 1-800-232-0325. You may also contact the Massachusetts Department of Public Utilities, Consumer Division at 617-727-3333 or toll free at 1-877-550-0048. TTY (for hearing impaired only) 1-800-430-8278 or website www.mass.gov/energy.