

Project Name:

JOE-4-SUN FALMOUTH

Community solar project built on a landfill

Size:

1.5 MW_{AC} | 2.0 MW_{DC}

Location:

458 Thomas B Landers Rd, East Falmouth, MA 02536

of LMI customers:

250

Project Website:

<https://www.citizensenergy.com/joe4sun-falmouth>

BEST PRACTICES

- Private/Equity investment financing
- Tax equity
- State incentives for LMI

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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. The (SMART) initiative.





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.

BEST PRACTICES

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.

- Non-Financial Best Practices:
 - Landfill to green-field
 - 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".

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www.nationalgridus.com

CUSTOMER SERVICE
1-800-322-3223
CREDIT DEPARTMENT
1-888-211-1313

POWER OUTAGE OR DOWNED LINE
1-800-465-1212

CORRESPONDENCE ADDRESS
PO Box 960
Northborough, MA 01532-0960

ELECTRIC PAYMENT ADDRESS
PO Box 11737
Newark, NJ 07101-4737

DATE BILL ISSUED
Nov 5, 2019

SERVICE FOR: **SAMPLE BILL**

BILLING PERIOD: **Jun 7, 2020 to Jul 5, 2020**

ACCOUNT NUMBER: **00000-00000** PLEASE PAY BY: **Jul 29, 2020** AMOUNT DUE: **\$ 54.82**

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ACCOUNT BALANCE

| | |
|----------------------------|-----------------|
| Previous Balance | 100.00 |
| Payment Received on JUN 10 | - 100.00 |
| Balance Forward | 00.00 |
| 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 | No. of days | Current Reading | Previous Reading | Total Usage |
|----------------|-------------|-----------------|------------------|-------------|
| Jun 7 - Jul 5 | 29 | 41991 Actual | 41676 Actual | 315 kWh |

METER NUMBER: 000000000 NEXT SCHEDULED READ DATE ON OR ABOUT: Aug 9

RATE: **Residential Low Income R-2**

| | |
|--------------------------------|-----------------|
| Customer Charge | 15.00 |
| Dist Chg | 20.00 |
| Transition Charge | -0.50 |
| Transmission Charge | 8.50 |
| Energy Efficiency Chg | 1.00 |
| Renewable Energy Chg | 0.20 |
| Distributed Solar Charge | 0.80 |
| Low Income Discount | -20.00 |
| Total Delivery Services | \$ 25.00 |

ELECTRIC USAGE HISTORY (kWh)

■ Actual □ Estimated

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PO Box 960
Northborough MA 01532

SAMPLE BILL

KEEP THIS PORTION FOR YOUR RECORDS.

RETURN THIS PORTION WITH YOUR PAYMENT.

| | | |
|----------------|---------------|------------|
| ACCOUNT NUMBER | PLEASE PAY BY | AMOUNT DUE |
| 0000-00000 | July 29, 2020 | \$ 54.82 |

ENTER AMOUNT ENCLOSED

\$

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

NATIONAL GRID
PO BOX 11737
NEWARK NJ 07101-4737

←
AMOUNT DUE

THE BALANCE OWED TO NATIONAL GRID. THIS VALUE IS EQUAL TO YOUR ENERGY CHARGES LESS YOUR BILL CREDITS FROM JOE-4-SUN.

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National Grid

| ACCOUNT NUMBER | PLEASE PAY BY | AMOUNT DUE |
|----------------|---------------|------------|
| 00000-00000 | Jul 29, 2020 | \$ 54.82 |

Enrollment Information

To enroll with a supplier or change to another supplier, you will need the following information about your account:

Leadwire
Acct No: 00000-00000 Cycle:

Supply Services

SUPPLIER: National Grid

| | |
|-----------------------|----------|
| Basic Service Fixed | 75.00 |
| Total Supply Services | \$ 75.00 |

Other Charges/Adjustments

| | |
|---------------------------------|--------|
| Transferred AOB Credit | -45.18 |
| Total Other Charges/Adjustments | -45.18 |



**TRANSFERRED
AOB CREDIT**

**THIS IS THE
VALUE OF THE
BILL CREDIT
YOU RECEIVE
FROM JOE-4-
SUN.**

We offer a wide variety of payment plans for four or more months, including the standard plan, negotiated plans, and **Budget Billing**. Budget or Balanced Billing is a great plan for heating customers that helps balance your seasonal bills.

Aviso importante! Si usted no entiende este aviso, llame a la compañía al: 1-800-322-3223.

Right to Dispute Your Bill

If you believe your bill is inaccurate or you wish to dispute all or part of your bill, including the time over which your arrearage is to be paid, please contact: National Grid at 1-800-322-3223 and request an investigation by a Company Complaint Officer. If you are not satisfied with the written decision or did not receive a written decision within 30 days, or if you continue to dispute the time over which your arrearage is to be paid, you have a right to appeal to the Massachusetts Department of Public Utilities, Consumer Division, One South Station, Boston MA 02110. Telephone 617-737-2836 or 1-877-856-5066 or TTY (for the hearing impaired only) 1-800-429-2370.

Department of Public Utilities

DPU regulations provide that a company may not terminate electric service for failure to pay any portion of a bill when a customer complaint or appeal is pending.

Arrearage Management Program (AMP)

AMP provides arrears forgiveness to income-qualified residential customers. Participants must accept and stay current with monthly Budget Billing payments. For complete details and an application, visit www.nationalgridus.com or call the number on the front.

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 on an actual meter reading. It is usually rendered when we are unable to read your meter.
Meter Multiplier: A number by which the usage on certain meters must be multiplied by to obtain the total usage.
Demand Charge: The cost of providing electrical transmission and distribution equipment to accommodate your largest electrical load.
Supplier Service Charges are comprised of:
Generation Charge: The charge(s) to provide electricity and other services to the customer by a supplier.
Delivery Service Charges are comprised of:
Customer Charge: The cost of providing customer related service such as metering, meter reading and billing. These fixed costs are unaffected by the actual amount of electricity you use.

Right to Electric Service

If you have a financial hardship you (or anyone presently and normally living in your home) have a Right to Electric Service in the following situations:
• During serious illness: Contact your registered physician, physician assistant, nurse practitioner or local Board of Health official and have them telephone the Company immediately at 1-888-211-1313. Within seven (7) days of the phone call your registered physician, physician assistant, nurse practitioner or local Board of Health official must certify in writing, to the Company, that serious illness exists. The certificate protects against termination for 90 days (180 days if chronic illness) and may be renewed. Your failure to renew such certification of serious illness as set out above may result in your service being terminated.

Questions:

If you have questions or complaints regarding this bill or National Grid's service quality, please contact Customer Service at 1-800-322-3223. You may also contact the Massachusetts Department of Public Utilities, Consumer Division at 617-737-2836 or toll free at 1-877-856-5066, TTY (for the hearing impaired only) 1-800-429-2370 or web site www.mass.gov/dpu.

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 terminating its 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 program services offered by the Company.
Renewable Energy Charge: A charge to fund initiatives for communicating the benefits of renewable energy and fostering formation, growth, expansion and retention of renewable energy and related enterprises.
Distributed Solar Charge: Recovers the cost of the Massachusetts solar program, including payments to owners of solar systems.
Notice About Electronic Check Conversion
By sending your completed, signed check to us, you authorize us to use the account information from your check to make an electronic fund transfer from your account for the same amount as the check. If the electronic fund transfer cannot be processed for technical reasons, you authorize us to process the copy of your check.

- You have a child under twelve months old living in the home.
- All adults in the home are age 65 or older and a minor also resides in the home.
- Between November 15 and March 15 if your service is heat related.
- Elderly Household: If all residents in your household are 65 years of age or older; the Company cannot terminate your service for failure to pay a past due bill without the approval of the Massachusetts Department of Public Utilities (DPU).
- For additional information on the right to electric service, please contact our Credit Department at 1-888-211-1313 or visit www.nationalgrid.com