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The Role of Net Energy Metering in the Evolving Electricity System

28 April 2022

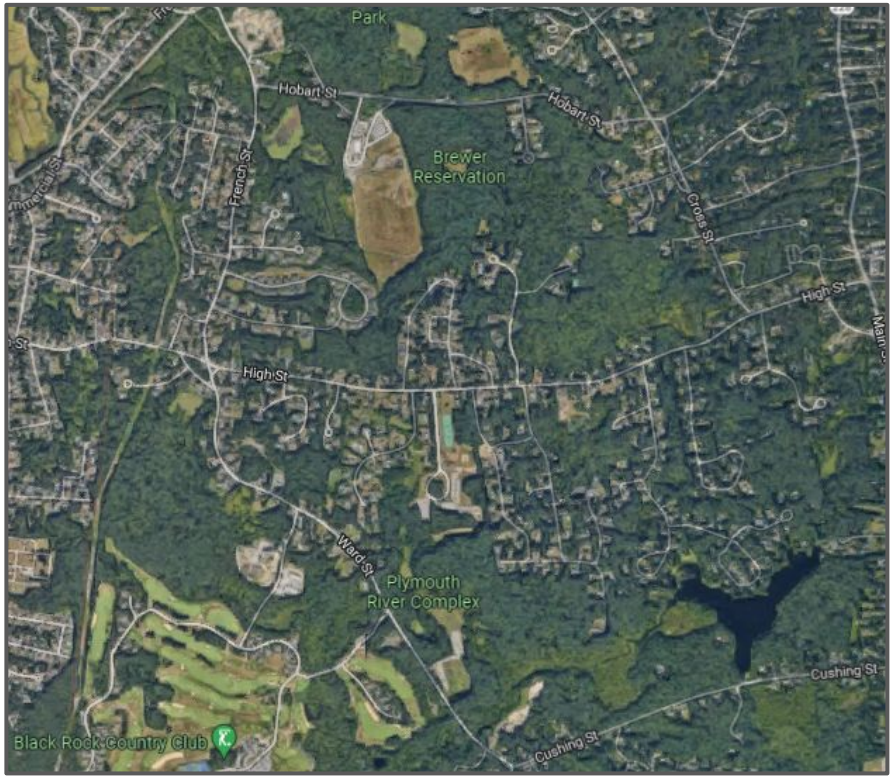
Our Work

1. Solar+ installation
2. Workforce development
3. Policy leadership
4. Program administration
5. Clean mobility

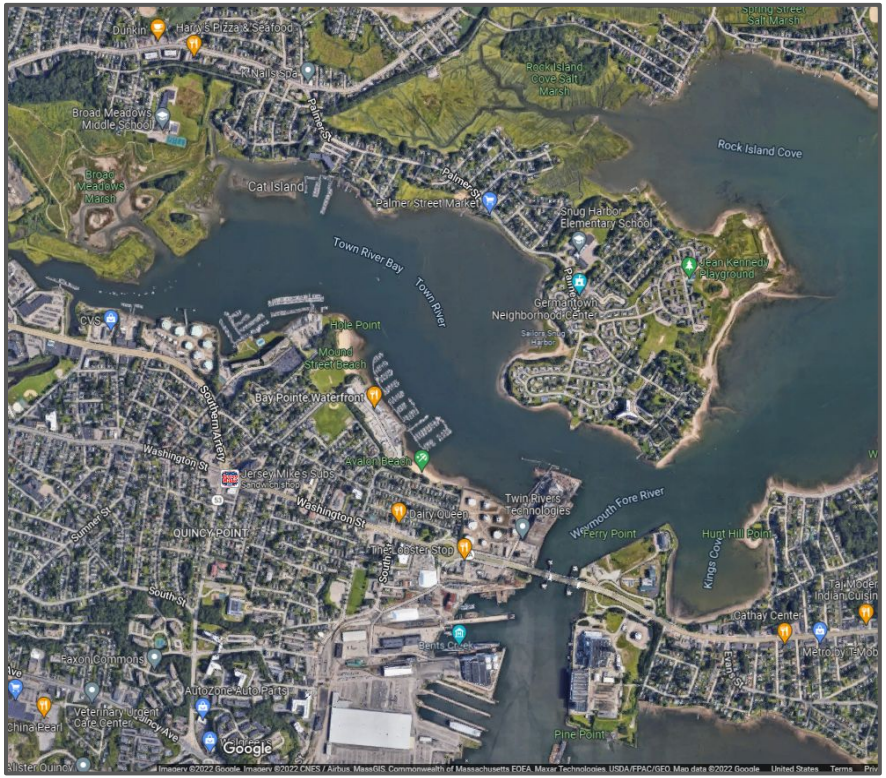
About Me

…and how it's relevant to NEM

Mom's house



Dad's house



Journey to the RIM: *The Cost of Devalue*

AB961 (Non-Energy Benefits)

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. The Legislature finds and declares all of the following:

(a) Unrecognized nonenergy benefits in cost-effectiveness tests employed by the Public Utilities Commission devalue important community benefits of ~~clean energy and energy efficiency~~ *distributed energy resource* projects and discourage beneficial investments in environmental and social justice communities.

(b) Nonenergy benefits represent the array of diverse impacts of energy programs and projects beyond the generation, conservation, and transportation of energy. Nonenergy benefits exist in three overarching categories: participant nonenergy benefits, utility nonenergy benefits, and societal nonenergy benefits.

(c) Participant nonenergy benefits accrue to the program participants, including, but not limited to, reduced building or home operating costs, lower energy burden, increased property value, improved health, safety, and comfort, educational opportunities, increased energy reliability and household resilience, asset ownership, and beneficial fuel switching.

(d) Utility nonenergy benefits accrue as indirect costs or savings to the utility, including, but not limited to, bill payment improvements and reduced arrearages, reduced bad debt, infrastructure savings, improved fire safety, system resilience, and increased reliability for customers.

(e) Societal nonenergy benefits represent indirect program effects beyond those realized by ratepayers, the utility, or participants, and they accrue to society at large, including, but not limited to, quality local job creation, economic development, growth of tax receipts, increased community resilience, increased labor productivity, lower energy costs, increased property values, neighborhood stability, reduced emissions of greenhouse gases, improved air quality and other environmental benefits, avoided short- and long-term displacement, improved fire safety, development of and access to new technologies, improved public health and reduced health care costs, meaningful community engagement, community pride, ratepayer satisfaction through thoughtful equity and inclusion, reduced water use, and reduced reliance on fossil fuels.

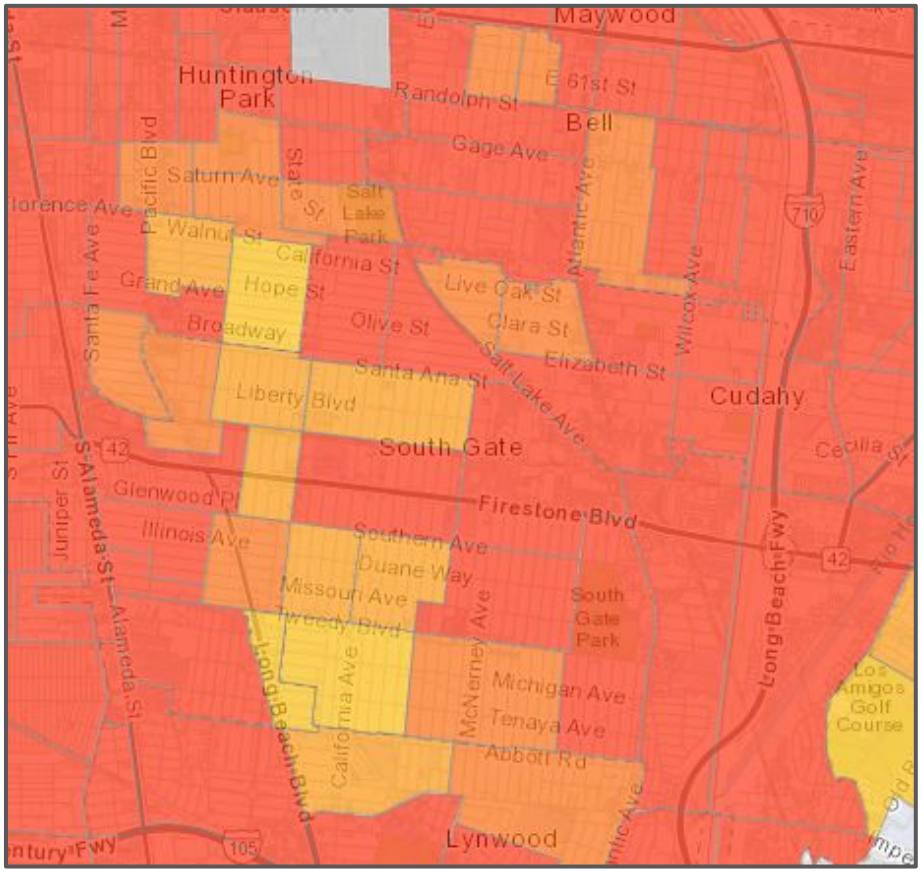
"ESJ communities have limited **access** to clean energy programs that could help reduce their energy burden. One of the reasons for this lack of access is the CPUC's cost-effectiveness calculations for potential programs."

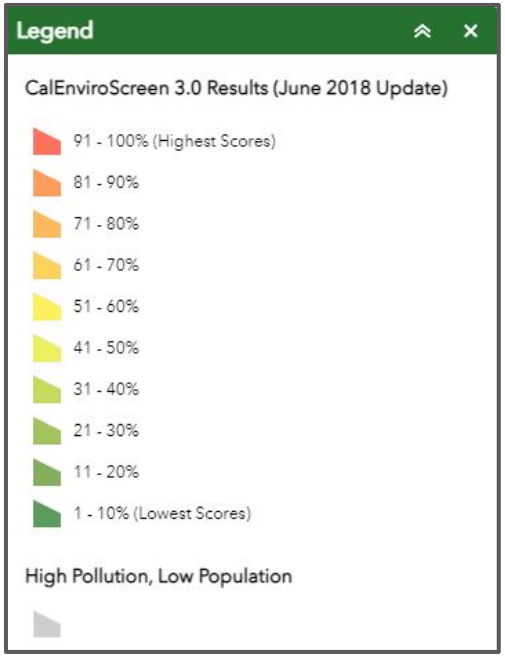
Who is indifferent to these societal benefits?

Societal Benefits Provided by DERs

- Lower energy costs
- Increased community resilience
- Quality local job creation
- Economic development
- Growth of local tax receipts
- Increased labor productivity
- Increased property values
- Neighborhood stability
- Improved fire safety
- Development of and access to new technologies
- Reduced emissions of greenhouse gases
- Improved air quality and other environmental benefits
- Improved public health and reduced health care costs
- Reduced reliance on BUGs
- Ratepayer satisfaction through thoughtful equity and inclusion
- Community pride

Journey in the RIM: The Non-Participant Cost Test





Taking this Perspective to Net Energy Metering

Thesis:

1. Grow low-income solar+storage 10x in short order
2. Do not diminish the financial benefits low-income families need to adopt
3. At least, do no harm (no additional financial barriers)

Enter: The NEM PD

- GRID responded recommending for any customer under 80% AMI (ESJ community):
    - Preserve a similar amount of monthly bill savings
    - Do not add a large monthly fixed cost
    - Do not require eligible customers to enroll on 3:1+ peak/off-peak rates
    - Increase investment from $600m ---> $1b over ten (evergreen)

Journey Beyond the RIM:
The Role of Net Energy Metering in the Evolving Electricity System

Questions to consider:

1. **Is managing to a RIM test a race to the bottom?**
   a. The higher the RIM, the more non-participants

2. **Which ratepayer is considered *indifferent* to wanting to benefit from locally-generated/stored solar?**

3. **How can the multitude of co-benefits be quantified to drive the economics of DG for EJ communities?**
   a. Proper accounting = including NEBs in benefit score of RIM &/or TRC &/or showing a SCT


ESPN
KEVIN GARNETT
Celtics: 17th NBA title (1st since 1986)