

Calculating Metered Savings Using CalTRACK and the OpenEEMeter

Instructors: Ethan Goldman and McGee Young, Recurve

Monday, August 19 | 8:30 am – Noon

\$95 | Includes 1 break

Background: CalTRACK (more information at [CalTRACK.org](https://www.caltrack.org)) is a detailed whole building evaluation method currently being used as a consistent foundation for settlement in meter-based pay for performance programs in California and New York.

It is also being used as the basis for program planning and implementation in several other jurisdictions in the country as part of third party program plans or by evaluation teams at utilities and program administrators. With this broader adoption, it is important that evaluators, utility staff and program administrators understand the methods of CalTRACK, including their historic origins, relation to industry best practice, technical details of the methods, and appropriate applications for the method.

Workshop overview: This is a workshop to familiarize participants with the CalTRACK methods and working group process, as well as giving a hands-on primer on applying the methods using the open source OpenEEMeter¹ package in a Python notebook. Participants will get an opportunity to use the free and publicly available OpenEEMeter code on their laptops for a small sample of test buildings.

Upon completion of the workshop, participants will:

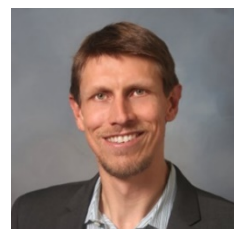
- Understand the need for standardized methods in pay-for-performance and energy efficiency procurements;
- Be able to describe the general components of the CalTRACK methods for billing, daily and AMI data;
- Be comfortable delving into the methods documentation to understand the justification for various methodological choices;
- Be able to install and use the eemeter and eeweather Python packages for applying CalTRACK analysis on a single building.
- Know how they can contribute to these methods and open source code projects

Intended Audience: Analysts and evaluators interested in learning about the CalTRACK methods and the OpenEEMeter how to apply them in practice.

About the Instructors:



Ethan Goldman, Director of Customer Solutions, Recurve (formerly OpenEE) was one of the first to apply the OpenEEMeter in a program implementation setting at VEIC and is currently helping clients make CalTRACK and the OpenEEMeter work for them in a wide range of applications. He has been working on energy metering, green informatics, and web application development for the last 17 years, both academically and professionally. He has created energy metering systems for disaggregating individual appliance consumption from whole-house power meter data in addition to his experience with data acquisition, sensor networks, data modeling, internet applications, and information visualization.



McGee Young, PhD, Chief Product Officer, Recurve (formerly OpenEE): McGee joined OpenEE in early 2016 to help build and deploy the OpenEEMeter platform. He manages most of the day to day operations around product development and platform deployments. Prior to OpenEE, McGee's experiences included both academic (Marquette University Faculty Member) and non-academic positions (Founder, CEO of H2Oscore and MeterHero). At Marquette University, McGee was a tenured member of the Department of Political Science

¹ OpenEEMeter is an open source project in LF Energy. <https://www.lfenergy.org/projects/>

and the Entrepreneur Faculty Fellow at the Kohler Center for Entrepreneurship. He was named to the 40 under 40 by the Milwaukee Business Journal in 2014. As CEO of two startups, McGee pioneered innovative business models to drive behavioral change amongst consumers through data-driven insights. He led the first third party integration ater data to improve customer engagement and drive conservation measures.