

Energy Market Methods Consortium (EM2)

**Kick off Meeting
February 19, 2019**

Agenda

Basic difference between CalTRACK and OpenEEMeter

Brief history and overview of “how we got to now”

EM2 Working Group Focus

Overview of charter and member roles and responsibilities

Calendar for 2019

Homework

CalTRACK & OpenEEMeter



- Standard Calculation Methods for Energy Efficiency and Electrification
- Monthly, Daily, and Hourly
- Public 60 Stakeholders Empirical Process
- www.CalTRACK.org

OPEN  METER

- Python CalTRACK Engine
- Open Source [Apache 2.0](https://www.apache.org/licenses/LICENSE-2.0)
- Available Without Restriction
- How It Works: <https://goo.gl/mhny2s>
- Code Repo: <https://goo.gl/qFdW4P>



OpenEEMeter

- Moving to Linux Foundation under LF-Energy Governance
- Provides world class "home" for the open source code base
- Familiar governance for code projects
- "Switzerland" for pre-competitive collaboration on the code
- Aligned with other open source projects that will affect energy
- GitHub still the same, but will migrate to LF-Energy
- Sign up to stay tuned via GitHub to track code updates or contribute to the code

CalTRACK Abbreviated History

- 2016 CalTRACK 1.0 was tackled as part of PG&E P4P HOPPS (monthly, daily); involved CEC, CPUC, 4 CA IOU's, DNV-GL, NREL, LBNL, OpenEE, etc.
- 2018 CalTRACK 2.0 was tackled to incorporate hourly methods (using AMI) and non-residential application of the methods; included over 60 individuals/organizations participating in development, many outside CA
- 2019 CalTRACK updates as necessary determined by working group; over 89 individuals asked to participate

CalTRACK

Now What?

- Iterated on a few charter concepts
- Feedback from small stakeholder group and other interested parties
- Linux Foundation pointed out JDF as a possible home
- Agree it looks good...but CalTRACK (i.e., metered savings) is not the only set of methods that needed to make things work...

Why Joint Development Foundation? (JDF)

- Instant umbrella as an independent legal entity and governance structure designed for standards
- Affiliated with Linux Foundation where the OpenEEMeter will “live”
- Longer term goal of the organization is to
 - have standards in JDF recognized by ISO and ANSI
 - not a high priority now, but much easier than doing it on our own

Energy Market Methods Consortium

supporting P4P and DER Markets

CalTRACK

avoided energy use

GRID

*adjustments for
savings claims*

SEAT

secure data access

CalTRACK – Boundaries [Working Group]

- CalTRACK is an avoided energy use consumption model
- Use case is for site-specific quantification rolled up to aggregate results for the treated population
- Does not try to isolate the effects of non-routine events
- Pay for performance tracking and settlement tool

GRID – Boundaries [Working Group]

- GRID will tackle consistent methods for potential adjustments to avoided energy use necessary for savings claims or to reflect incremental grid impacts
- Use case may be site-specific quantification adjustments or population level adjustments (or both)
- Potential standardized adjustments include for non-routine events, net impacts (participants v. population), persistence
- Pay for performance program savings claims, NWA, payments or forecasting inputs

SEAT – Boundaries [Working Group]

- SEAT will tackle consistent methods for secure data transfer within pay for performance market applications
- Use cases to support market access to site level energy consumption data, without violating individual privacy rules, for
 - forecasting,
 - carbon accounting,
 - energy modeling,
 - comparison groups, etc,

EM2 Technical Steering Committee

Qualification: Market Actors Paying On or Paying By Method

Responsibility: Adopt methods proposed by working groups

Project Executive Director

Responsibility: Execute Processes in Charter

CalTRACK

avoided energy use

GRID

*adjustments for savings
claims*

SEAT

secure data access

All Working Groups

Qualification: Associates & Contributors

Responsibility: Understand, review, test and recommend updates to methods based on empirical evidence and group consensus

What is it? How will it work?

- Project Creation
 - Joint Development Foundation Projects, LLC “series”
- Membership Agreement
 - Steering Committee
 - Executive Director
 - Project Funding
 - Initial Working Groups
- Project Charter
 - Requires approval of at least 2 steering committee members
 - Governance by Steering Committee
 - Executive Director selected by Steering Committee
 - Decisions by consensus or supermajority
 - Advanced notification required for all meetings and votes

Deliverable Development Process

- New methods and updates to existing methods developed through working groups
 - Pre-draft - any idea proposed to the working group as a potential deliverable
 - Draft - Approved by Working Group to become a draft deliverable. Basis of ongoing work
 - Working Group Approval - Vote to move draft deliverable to “Working Group Approved” status
- Steering Committee takes up Working Group Approved deliverables
 - Approval moves deliverable to “Approved Deliverable”
 - Executive Director oversees publication of approved deliverables
 - Steering Committee can approve submission of approved deliverables to standards bodies

Membership

Agreement with charter membership level establishes:

- *Organizations voting rights in group and*
- *Binds your org to intellectual property rights articulated in the charter*

Technical Steering Committee Members

Steering Members may participate in each Working Group and, unless waived per the Membership Agreement, the Steering Committee.

Associate

Associates may participate in each Working Group, but do not participate on the Steering Committee

Contributor

Contributors may participate in each Working Group, but do not participate on the Steering Committee and are not eligible to participate in decisions that require a Supermajority Vote

Executive Director

Responsibilities include leading the Steering Committee, organizing meetings, organizing voting, identifying new Working Groups, tracking Working Group progress, ensuring Working Group meet their goals, and any other activities Approved by the Steering Members.

Next Steps

CalTRACK 2.0 review:

Feb 20, 2019

Next CalTRACK Monthly

working meeting is:

February 27, 2019

[Shared Google Calendar](#)

Homework:

- Decide what level of membership is right for your organization and which working groups you want to join
- Sign the charter and return to Carmen, McGee or Bruce Mast (we will consolidate them and get to JDF)
- Add the relevant meetings to your calendar and start the collaboration!

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