

METEC Advisory Board Membership

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Background

The Methane Emissions Technology Evaluation Center (METEC) at Colorado State University (CSU) is a unique facility that simulates real methane emission sources from a broad range of natural gas facility operations. METEC was designed as a test site for the ARPA-E MONITOR program and involved significant input from an Industrial Advisory Board comprised of leading operators in the natural gas industry.

METEC provides controlled natural gas emission sources that reproduce emission profiles observed at natural gas facilities (location, magnitude, frequency, duration, and range of gas compositions). The 7-acre METEC site can simulate different aspects of the natural gas supply chain, such as wet and dry gas production, midstream compression, metering and regulating stations, and underground pipelines. The site can accommodate accurate characterization of a variety of technologies (ground-based, UAS-based, point sensors, far-field, etc.).

The METEC industry advisory board suggested we shift METEC to a fee-based membership after June 30, 2019* as an operational investment by membership to provide baseline funding for the facility staffing and to formalize the facility's structure. The METEC team delayed start of the METEC Advisory Board until January 2020. The intent for setting up this group remains the same.

This is the proposed structure for that system.

- 1) Advisory board memberships will meet periodically, approximately 3 times per year, to review operation of the facility, discuss future projects, and vote on priorities for the next 4-12 months.
- 2) Working with the advisory group and associated funding, METEC staff will expand or modify operation of the facility to support emerging requirements for testing, training, or research.
- 3) Governance will be via a simple membership agreement.
- 4) During periodic reviews, METEC staff and guest researchers will present results of ongoing research and testing work being performed at the facility.
- 5) Individual membership is open to operators, solution developers, NGOs, regulators and other interested in encouraging the practical science of leak detection and repair technologies.
- 6) University research groups with active projects at METEC will be considered advisory board members.

Membership fees will be used to:

- Maintain at least one permanent staffing (the facilities *managing* engineer).
- Provide site access for members as per *Cost and Access* terms, below.
- Maintain the facility to support testing of new solutions by industry.
- Funds permitting, developing classes & workshop to further understanding of current and next-generation leak detection methods.

* June 30th was the anticipated end date for ARPA-E funding of the facility, but was extended through September 30.

Cost and Access

Basic Individual Company Membership: Annual fee: \$8K. Includes:

- Participation in advisory board meetings for the facility; one vote per company. Additional guests per company are welcome; please inform METEC staff prior to the meeting.
- Reviews of ongoing research at METEC, including early access to internal research results funded by the membership fees.

Full Individual Company Membership: Annual fee: \$15K. Includes:

- Participation in advisory board meetings for the facility; one vote per company. Additional guests per company are welcome; please inform METEC staff prior to the meeting.
- Reviews of ongoing research at METEC, including early access to internal research results funded by the membership fees.
- Site access time:
 - 3 days of ad-hoc testingor
 - 3 days of group personnel training timeor
 - 1 week, or “standard block” of test time using pre-defined (i.e. not ad hoc) methods.
- Any such testing provided to Advisor as an added benefit to membership shall **not** be considered within the scope of the program under this Agreement, and in no event shall results from such testing be considered Project Information hereunder. Instead, such testing will be covered by separate agreement(s) between Advisor and CSU, with credit given in accordance with the above membership benefits. Such separate agreement(s) may include confidentiality obligations on CSU with respect to testing results, and Advisor shall be entitled to retain ownership of information and material generated in connection with such testing.

Association Membership: \$50K/year, grant or fee structure possible.[†] Includes:

- Participation in advisory board meetings for the facility; one vote per association.
- Reviews of ongoing research at METEC, including early access to internal research results funded by the membership fees.
- Association membership access to on-site events of interest to the association, such as training or working sessions.

Note: Fees for use of METEC are set annually in accordance with federal contracting rules. Currently, fees for ad-hoc testing are a one-time setup fee of \$1,250 and daily use fee of \$1,915. These are expected to change due to analysis of costs post-ARPA-E funding. Excessive gas releases, specialty gas requirements, additional equipment setup, use of analytic equipment at METEC (cameras, GC, etc.), test equipment design / construction, or similar are quoted as extra cost. CSU is developing additional products, potentially including OGI

[†] Depending upon the association’s charter, an association may need to pay via *grant* (i.e. funding with new agreement or statement of work), or via purchase order. Both are possible.

training classes, a data product to support long-term installs of leak detection solutions, and community training classes.

Initiation and Payment Structure:

- A management year will run January 1-December 31. Payment is due at the start of the management year. Membership starts when payment is made and runs through end of year.
- Membership and CSU will discuss membership fee, management structure and programs annually and suggest adjustments.
- A member may discontinue membership at any time, but fee cannot be refunded.