

RAPIDS 2022 Wastewater Treatment Program Application

The Risk Assessment, Process Improvement, and Decision Support (RAPIDS) is a third-party program focused on wastewater treatment process optimization for municipal and public agency wastewater treatment plants (WWTP) within the Pacific Gas and Electric Company (PG&E) service territory. The Program is designed and implemented by Alternative Energy Systems Consulting, Inc. (AESC) to provide technical services and decision support tools to accelerate the implementation of process-based energy management strategies.

RAPIDS brings together experts in biology, chemistry, process design, maintenance reliability, risk mitigation, and system engineering to take a 360-degree view of WWTPs and provide flexible energy management options that simplify efficiency improvements without compromising plant safety, regulatory and compliance objectives, or budget resources. The Program considers four areas of energy management: capital projects and equipment retrofits, biochemical process optimization, behavioral/operational improvements, and pump overhauls. Our approach is designed to identify up to 40% energy savings in the comprehensive Energy Action Plan that leads to continuous energy improvements and a phased capital project schedule to meet the needs of each customer.

RAPIDS accelerates wastewater energy management solutions using three foundational services:

RA Risk Assessment	We consider treatment processes and process optimization projects in terms of risk, risk avoidance, and risk mitigation. We focus on your mission-critical objectives and enhance reliability through energy.
PI Process Improvement	We identify process improvements that address risks, improve operational reliability, visibility, control, and energy performance.
DS Decision Support	We provide deep expertise to analyze the risks and benefits of energy options to enable and accelerate agency decision-making and approvals.

Technical Engineering Services Offered

The RAPIDS program includes the following engineering services:

- Operations & Maintenance Workshop to determine optimization priorities
- Energy Action Plan development
- Energy Efficiency Measure (EEM) analysis
- Failure Modes and Effects Analysis or Consequence of Failure Analysis
- Incentive and On-bill Financing (OBF) application support
- Basis of Design and Preliminary Design Documentation
- Cloud-based real-time submetering equipment deployment

Program Eligibility Requirements

The RAPIDS program is open to wastewater customers who meet the following criteria:

- Wastewater treatment system owned and operated by a city, county, or special district within PG&E service territory
- PG&E service territory includes climate zones 1, 2, 3, 4, 5, 11, 12, 13, and 16
- Receive natural gas and/or electric services from PG&E
- Participants must be a PG&E customer paying the Public Purpose Program Charge.
- NAICS codes eligible for the Program: NAICS 22132 - Public and private sector wastewater treatment and collection systems
- Purchase at least 70% of total energy, or 1 MWh/yr, from PG&E at the discretion of the Program
- Excludes net power producers

The RAPIDS program accepts a wide variety of wastewater energy-savings projects. Measure eligibility will be made at the discretion of the Program on a per-site basis, however, all measures must meet the following criteria:

- Exceed baseline energy performance
- Must Operate at least five years or for the life of the incentivized products
- Be permanently installed
- Cannot overlap with other incentive programs
- Existing Equipment decommissioned and removed from the site

What to Expect

Step 1: Preparing for Enrollment	<ul style="list-style-type: none"> • Complete, Sign & Submit RAPIDS Application • Project Agreement Review • Project Enrollment Approval
Step 2: Project Planning	<ul style="list-style-type: none"> • Project Site Visit & O&M Workshop • Energy Action Plan • Complete, Sign & Submit RAPIDS Agreement • Program Participation Agreement Signed • Submetering • Incentive / Loan Application Submittal to Utility • Utility Project Incentive/Loan Approval
Step 3: Construction and Completion	<ul style="list-style-type: none"> • Design Assistance • Project Construction • Project Measurement & Verification • Utility Confirms Project Completion

How to Apply

Complete and sign the application. Submit the completed application to RAPIDS@aesc-inc.com

Applicant Information

Facility Name

Facility Address

City

State

Zip

Contact Name

Contact Title

Contact Mailing Address

City

State

Zip

()

Phone

Email

**We will only use your email address to provide timely project information updates.*

Applicant Account Information

PG&E Electric Account No./Service ID (at facility) _____

PG&E Natural Gas Account No. /Service ID (at facility) _____

Does the facility have interval meter(s)? Yes No

EIN/Federal Tax ID _____

Program Incentives

Optional Enabling Incentives*

- Submetering: \$10,000 to \$25,000 per site
- Conceptual Design Assistance: \$12,500 to \$30,000 per site

**Optional enabling incentives will be scaled based on plant size, measure savings potential, and customer commitment. The value of enabling incentives will be subtracted from the customer's final project incentives.*

Financial incentives will be available to customers based on verified energy savings, to overcome financial and operational/organizational barriers.

Category	\$/kWh	\$/kW	\$/Therm
Behavioral, Retro-Commissioning and Operational (BRO)	\$0.04	\$50.00	\$1.00
Custom Retrofit (≤ 5 year EUL or AR to-code)	\$0.04	\$50.00	\$1.00
Custom Retrofit (> 5 year EUL and AR above code)	\$0.12	\$150.00	\$1.00

RAPIDS is funded by California utility customers and administered through PG&E under the auspices of the California Public Utilities Commission. The program is implemented and managed by AESC and their authorized representatives.

Terms and Conditions

I, the Applicant, have read and agree to the following terms and conditions:

- 1. AUTHORITY.** Customer represents and warrants it has the Project Site owner's permission to enroll in the RAPIDS program, participate in workshops, site inspections and support the completion of an energy action plan on the site's behalf.
- 2. PROJECT APPROVAL AND PRODUCT QUALIFICATION.** Should you pursue an incentive, projects may be required to receive written Project Approval in accordance with the applicable requirements in the Program Manual, which can include the CPUC Energy Division (ED) review and approval for the Project. Until approved, Projects must not remove any existing Project equipment/systems, pre-order, purchase, or install any equipment. Equipment leased, rebuilt, rented, received from warranty or insurance claims, exchanged, or won as a prize; new parts installed in existing equipment, or resale products do not qualify.
- 3. NO OBLIGATION.** California consumers are not obligated to purchase any full-fee service or other service not funded by this Program. This Program is funded by California utility ratepayers under the auspices of the CPUC. Los consumidores en California no están obligados a comprar servicios completos o adicionales que no estén cubiertos bajo este programa. Este programa está financiado por los usuarios de servicios públicos en California bajo la jurisdicción de la Comisión de Servicios Públicos de California (CPUC).
- 4. LIMITATION OF LIABILITY.** PG&E & AESC shall not be liable for any costs due to a Project's estimated versus actual energy savings related to the Project Incentive to be paid, Project savings that did not materialize, Project cancellation or implementation cost increase for any reason. In no event shall PG&E or AESC, be liable for any special, incidental, indirect, lost profits, or consequential damages arising from or related to Customer's Project.
- 5. ADVERTISING AND USE OF PG&E'S NAME.** AESC and Customer agree not to use each other's name, PG&E's name or identifying characteristic of customer's Project Site in any published materials absent the written approval of such respective party.
- 6. TOXIC MATERIALS.** PG&E and AESC shall have no responsibility for the discovery, presence, handling, removal, or disposal of or exposure to hazardous materials of any kind related to implementing the Project, including without limitation, asbestos, PCBs, or other toxic substances.

Customer Signature & Acknowledgement of Terms and Conditions

Applicant agrees to provide the required documentation as requested for the completion of an Energy Action Plan by AESC. Applicant is willing to consider efficiency recommendations which may improve the performance of their facility significantly beyond PG&E Industry Standard Practice requirements.

Applicant understands that participation is voluntary and that it is under no obligation to modify the design or construction of its facility based on resulting recommendations. Applicant also understands that it will receive financial incentives only if it enters into a RAPIDS Program Participation Agreement at a later date, its eligibility is established by AESC, the performance of Applicant's facility meets the requirements, and the energy efficiency measures are installed and verified.

Applicant has reviewed and agrees to be legally bound by the attached Program terms and conditions.

_____ Name (Print)	_____ Title (Print)
_____ Signature	_____ Date
_____ Name (Print)	_____ Title (Print)
_____ Signature	_____ Date