



Customer Energy Efficiency Program

Advanced Pumping Efficiency Program

The Advanced Pumping Efficiency Program (APEP) is an educational and incentive program intended to improve overall pumping efficiency and encourage energy conservation in California.

Pumping water for delivery, pressurization, purification, and sewage consumes one-fifth of the total energy used in California. APEP can help you minimize your energy use for pumping.

ELIGIBILITY

Eligibility extends to all owners or users of a non-residential, PG&E electric or natural gas utility account that is primarily used for pumping water for production agriculture, landscape or turf irrigation, or municipal purposes, including potable and tertiary-treated (reclaimed) water but excluding pumps used for industrial processes, raw sewage, or secondary-treated sewage, and who are paying the Public Purpose Programs Charge. Other factors may apply. Refer to the Policies and Procedures Manual, available on the APEP web site at www.pumpefficiency.org or contact APEP for full eligibility criteria.

APEP OFFERS FOUR SERVICES TO WATER PUMPERS

- 1. Education** – Free educational seminars on various aspects of pumping and water management are provided throughout PG&E's service area. The APEP web site at www.pumpefficiency.org has an events calendar that lists all presentations and seminars. You can also call any of our regional offices at the numbers listed on the back page.
- 2. Technical Assistance** – Program personnel are available to help in locating pump efficiency testers, completing a pump retrofit/repair incentive rebate application form, or answer general questions as to pumping plant design and use (site-specific engineering services are not available). Call any of the regional offices at the numbers listed on the back page.
- 3. Subsidized Pump Efficiency Tests** – Pump efficiency tests provide important data, including flow rates, well lifts (if applicable), discharge pressures, motor loading, and most importantly, the Overall Pumping Efficiency (OPE). The pump test report contains measurements and calculations that result from the test as well as a pumping cost analysis. This cost analysis provides an estimate of how much money could be saved as the result of a pump retrofit. Subsidies, subject to funding availability, are paid directly to APEP "participating pump test companies."
- 4. Pump Retrofits** – Cash incentives are available for retrofit of working, electric or natural gas-powered water pumps. The only project-type eligible is retrofit of either or both of the pump impeller or bowl. Pump retrofit projects cannot have started prior to January 1, 2006 and will require pump efficiency tests both before and after the retrofit project is complete (although these tests do not have to be by APEP testers).

Since 2006 APEP has provided cash incentives and subsidized pump efficiency tests for farmers, cities, large turf growers, golf courses, and water agencies totaling:

- 13,500 pump efficiency tests with \$2.3 million in subsidies
 - \$3.5 million in incentives for pump retrofit/repair projects
 - 80 educational seminars
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The Mobile Education Center can bring pump education to your event location.

PROGRAM SUCCESS FOR CITIES

APEP has provided over \$1.5 million in incentives for over 275 retrofits involving municipal, water agency, and private water company pumping plants since 2006. This has resulted in over 24 million kilowatt-hours saved in the first year after the retrofit alone. These projects included water supply wells, booster stations, and golf course and soccer field sprinkler systems. These projects not only save energy use and costs but also increase system reliability.



PROGRAM SUCCESS FOR AGRICULTURE

In a two-year period, Alpaugh Irrigation District (AID) decided to repair five 200 horsepower deep well pumps. These pumps, along with well cleaning, cost over \$100,000 to bring them back to peak efficiency. The energy savings for these pumps was over 1.2 million kilowatt hours per year and the District received over \$50,000 in incentive rebates.

Through the implementation of these repairs, AID has been able to control its operating costs and offer competitive rates for its customers. "This program has been very beneficial to AID," says Kevin Couch, District Manager. "In addition, it has helped reduce overall energy demand in the state."

WHAT IS A PUMP EFFICIENCY TEST?

A pump test measures various aspects of the pump's operation including flow, discharge pressure, well lift (if applicable), and power use. The end result of a pump test is an estimate of the overall efficiency of your pump and the cost of running it under the conditions of the test. The test may also give an indication of water well performance.

HOW TO OBTAIN A SUBSIDIZED PUMP EFFICIENCY TEST

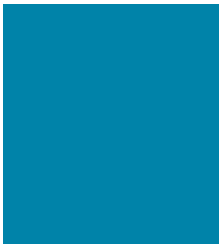
Subsidized pump efficiency tests are available, subject to budget availability, from APEP-approved participating pump test companies.

Important restrictions include:

- Only one test is available per pump every 23 months.
- The pump must be 25 horsepower or greater.
- In the case of a well the pump tester must be able to measure the pumping water level.
- Tests are not available for real estate transactions or to satisfy a mandate of any government or quasi-government agency.

Other restrictions may apply.

The APEP pump efficiency test is subsidized. You are responsible for knowing how much the test company will charge you and whether you will have to provide funds in addition to the Program subsidy.



APEP offers technical assistance and hands-on educational seminars.

To obtain a pump test:

1. Contact the participating pump test company of your choice to arrange a test. Log on to the Program web site or call one of the Program offices listed on the back page if you need assistance in locating a test company.
2. You will have to sign an Access Agreement (granting legal access to your pump) before the test and a Record of Test (providing proof to the California Public Utilities Commission that the test was performed) after the test.
3. The tester will provide both you and the Program with a pump test report. You can discuss the results of the test with the test company or Program personnel.
4. The subsidy will be provided directly to the test company by the Program and the test company will take care of all other paperwork.



HOW TO APPLY FOR A CASH INCENTIVE FOR A PUMP RETROFIT

The Program offers cash incentives, subject to budget availability, for retrofitting eligible pumps of any size to increase efficiency. The incentive is based on your annual energy use. The more energy you use, the larger the potential incentive. However, the maximum incentive possible is 50 percent of the project cost.

Note these important program rules:

- Any retrofit project started on or after January 1, 2006 may be eligible for an incentive. Please contact us regarding projects you may have already completed in order to increase pumping efficiency.
- Only one incentive can be paid per individual pump in any one six-year period.
- A valid pump efficiency test must be performed before the retrofit project is completed and must have been done after June 1, 2002 and within five years of the project start.
- A pump test must be performed after project completion and within six months after the application is approved.
- Projects involving multiple pumping systems are not eligible for APEP incentives. Contact APEP or PG&E to determine whether PG&E has other programs for which your project may be eligible.
- The pumping system must be operational (or have been at the time of retrofit).
- The incentive cannot be combined with any other grant, incentive, rebate, or service offered for the project by one of the investor owned utilities or any state or local agency.

Other restrictions may apply.

If the Program has a copy of a pump test done for your pump, we can prepare an application that is substantially complete for you. All that will be needed is your signature, information on who will receive the incentive, and information regarding the retrofit performed.





To participate:

1. Obtain an Application form by either calling the Program office or downloading a form from the Program web site. Participating pump test companies and many pump service companies may also have copies.
2. Fill out the form as directed and submit to the main Program office along with a copy of the pump efficiency test performed before the retrofit. An Application can be submitted either before or after the project has been completed.
3. The Program will review the Application. They may ask for more information and may recalculate the estimated incentive. The Program will notify you when it is approved, and your estimated incentive amount.
4. If the Application is being submitted before the project is complete, you must notify the Program when the project is finished and submit required documentation. The Program will verify all information, may recalculate the incentive based on the post-test, and will inform you when the Application is fully approved.

The Advanced Pumping Efficiency

Program can help you improve overall pump efficiency and save energy. We are here to help every step of the way.

APEP CAN HELP YOU TO MINIMIZE YOUR PUMPING COSTS

APEP maintains regional offices in Northern California, the San Joaquin Valley, and the Central Coast. Log on to the web site at www.pumpefficiency.org. Here you will find summaries of all Program components, a calendar of upcoming events, application forms, phone numbers and e-mail addresses of the regional offices, and a knowledge-base to help you conserve energy and water.

Contact us to see how a pump efficiency test can provide you with the critical information required to make a decision as to a retrofit. Applying for the retrofit incentive is easy and we are here to help every step of the way.

- Northern California regional office – **1-559-260-6148**
- San Joaquin Valley (main office) – **1-800-845-6038** / fax to **1-559-278-2998**
- Central Coast regional office (San Mateo County to Ventura County) – **1-805-547-1130** / **1-805-709-4180**

Or, call your PG&E account representative.

