

PACIFIC GAS AND ELECTRIC COMPANY

PGE + 215 MARKET STREET • SAN FRANCISCO, CALIFORNIA 94106 • (415) 972-7000 • TWX 910-372-6587

May 22, 1989

Local Union No. 1245
International Brotherhood of
Electrical Workers, AFL-CIO
P. O. Box 4790
Walnut Creek, CA 94596

Attention: Mr. Jack McNally, Business Manager

Gentlemen:

Pursuant to Section 600.1 and Exhibit VI of the Physical Agreement, the Company proposes to establish an air conditioning efficiency pilot program in San Joaquin Valley Region. The details of the pilot program are described below:

PURPOSE

To provide between 300 - 500 residential customers within San Joaquin Valley Region with a free efficiency evaluation of their air conditioning equipment in order to help them control their energy usage.

PILOT PROGRAM LENGTH

The pilot program is proposed to begin in June 1989 and end in October 1989.

TRAINING PROGRAM

A four-day training class is scheduled for May 30, 31, and June 1, 2, 1989. The content of the class is contained in Attachment I.

CLASSIFICATION

The Company proposes to have the Service Mechanic (1405) perform the duties associated with the pilot program.

DUTIES

The Service Mechanic will perform the duties outlined in Attachment II for the pilot program.

SELECTION AND NUMBER

Each division in San Joaquin Valley Region will have a maximum of two employees trained in the pilot program. The attendees will be selected as follows:

- a) Incumbent Service Mechanic on a voluntary basis.

- b) Senior Servicemen with prebids on file to Service Mechanic on a voluntary basis.
- c) If there are no prebidders to Service Mechanic or no volunteers from prebidders, then select the senior Servicemen from a list of volunteer Servicemen.

Only the employees attending the above-referenced training class will participate in the pilot program.

If you are in accord with foregoing and the attachment and agree thereto, please so indicate in the space provided below and return one executed copy of this letter to the Company.

Yours Very Truly,

PACIFIC GAS AND ELECTRIC COMPANY

By *Paul B. Brady*
Manager of Industrial Relations

The Union is in accord with the foregoing and the attachment and it agrees thereto as of the date hereof.

LOCAL UNION 1245, INTERNATIONAL
BROTHERHOOD OF ELECTRICAL WORKERS,
AFL, CIO

June 8, 1989

By *Jack McKinley*
Business Manager

:mc

AIR CONDITIONER MAINTENANCE PILOT PROGRAM

PRELIMINARY AGENDA

TUESDAY MAY 30 (Conducted by the Stockton Training Center)

- 8:30 Overview of Cooling Systems
- 9:15 Variable Properties of Air
- 9:45 Ventilation Cooling Systems
- 11:00 Evaporative Cooling Equipment
- 12:00 (lunch)
- 1:00 Cooling Conservation Practices/Measures
-Building Envelope
 Insulation and Weatherization
 Shading Sun Exposed Glass
 Window Treatments
 Deciduous Vegetation
-Appliance Usage: Timing and Choice of methods
-Time of Use Metering and summer challenges
- 3:30 System Identification exercises
- 4:30 Adjourn

WEDNESDAY MAY 31 (Conducted by the Stockton Training Center)

- 8:30 Refrigeration Cycle Basics
-Compressors, condensers, expansion valves,
 evaporators
-Pressure/Temperature control
-System Maintenance Overview
-System Types: Unitary/Central: Split & Package
- 10:30 Heat Pump Systems
- 12:00 (lunch)
- 1:00 Thermostatic Control Systems
-Conventional
-Electronic
-Heat Pump Electronic
- 3:30 Thermostat Adjustment Lab Activity
- 4:30 Adjourn

THURSDAY JUNE 1 (Conducted by A.S.W. Engineering)

- 8:30 Residential A/C Maintenance Procedures
- 10:00 Diagnosis of System Performance
- 11:00 Troubleshooting Improper Operation
- 12:00 (lunch)
- 1:00 Refrigerant Charging Theory
-Leak Detection and Repair
-Evacuation
-Determining Proper Charge
-Gauges, System Connections
-Measurement of Performance
- 4:30 Adjourn

FRIDAY JUNE 2 (Conducted by A.S.W. Engineering)

- 8:30 Laboratory Activities:
-Maintenance Practices
-Refrigerant Charging
- 12:00 (lunch)
- 1:00 Laboratory Activities (Delta College HVAC lab)
- 4:00 Adjourn

INSPECTION ITEMS PERFORMED BY GAS SERVICE DEPARTMENT ON
RESIDENTIAL ELECTRIC AIR CONDITIONING UNITS:

1. Check air handler filters
2. Check for adequate refrigerant charge
3. Check for refrigerant leak if system is short
4. Check condenser and clean if necessary
5. Lubricate condenser fan motor
6. Check condenser fan blades for tightness
7. Tighten all electrical connections
8. Check voltage at unit under full load
9. Check condensate drain for blockage
10. Check blower belt for condition, tension, and alignment
11. Lubricate all bearings
12. Check blower for cleanliness
13. Inspect contactor contacts
14. Check and clean thermostat
15. Inspect evaporator coil for cleanliness
16. Inspect starting capacitor
17. Inspect running capacitor
18. Check running and starting amperages
19. Inspect relay
20. Check for vibration and noise
21. Make recommendation of any needed repairs to system

ATTACHMENT II