



**Pacific Gas and  
Electric Company**

# LETTER AGREEMENT NO. 06-52-PGE

**IBEW**



PACIFIC GAS AND ELECTRIC COMPANY  
LABOR RELATIONS DEPARTMENT  
2850 SHADELANDS DRIVE, SUITE 100  
WALNUT CREEK, CALIFORNIA 94598  
(925) 974-4104

INTERNATIONAL BROTHERHOOD OF  
ELECTRICAL WORKERS, AFL-CIO  
LOCAL UNION 1245, I.B.E.W.  
P.O. BOX 2547  
VACAVILLE, CALIFORNIA 95696  
(707) 452-2700

STEPHEN A. RAYBURN  
DIRECTOR AND CHIEF NEGOTIATOR

TOM DALZELL  
BUSINESS MANAGER

March 5, 2007

Mr. Tom Dalzell, Business Manager  
Local Union No. 1245  
International Brotherhood of  
Electrical Workers, AFL-CIO  
P.O. Box 2547  
Vacaville, CA 95696

Dear Mr. Dalzell:

The Company and Union established a joint subcommittee of the Joint Training and Apprenticeship Committee (JATC) to review and update the Apprentice Gas Technician Training Program. The recommendations of the subcommittee were presented to the JATC for review and received approval to proceed in recommending the revised Apprentice Training Program for Company and Union approval. The proposed changes are contained in the attached Administrative Procedures Manual.

The attached revised program will replace the existing Apprentice Gas Technician Training Program.

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

Very truly yours,

PACIFIC GAS & ELECTRIC COMPANY

By: \_\_\_\_\_


  
Stephen A. Rayburn  
Director and Chief Negotiator

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

LOCAL UNION NO. 1245, INTERNATIONAL  
BROTHERHOOD OF ELECTRICAL WORKERS, AFL-CIO

16 March, 2007

By: \_\_\_\_\_

  
Tom Dalzell  
Business Manager

Pacific Gas & Electric Co .

General Construction

Gas Measurement & Control Dept.

APPRENTICE GAS TECHNICIAN

Training

Program Update

**Final Draft**  
**August 11, 2006**



**Pacific Gas and  
Electric Company\***

TO: Joint  
Apprenticeship  
Training Committee

July 31, 2006

To the members of the Joint Apprenticeship and Training Committee:

The members of the Gas Technician Apprenticeship Sub-committee are pleased to inform you that all members have approved the updated version to the Title-300 Gas Technician apprenticeship program.

All of the committee members were involved in the unanimous decision to reinstate 11 TPC books into the home study section as a requirement of the program. We saw great value in all of the books that we have included in the updated program. All members agreed to incorporate formal classes on Gas SCADA, Gas Chromatography, and Programmable Logic Control. All three classes will improve our program by aligning it with the current technology and instrumentation that we currently install throughout the gas transmission system.

It is our opinion that we have brought our apprenticeship program back from a state of obsolescence to a meaningful and interesting program.

We would appreciate the approval of the Joint Apprenticeship and Training Committee members of our program and look forward to the approval of our update by the state of California.

Thank you for your patience and understanding.

Gas Technician Apprenticeship Sub-committee GC M&C

Company Members:

*Don Creekmore*

Don Creekmore / Northern Area Foreman

*Michael Lang*

Michael Lang / Southern Area Foreman

IBEW Members:

*David Maples*

David Maples / Technical Crew Leader-B

*Michael Glass*

Michael Glass / Gas Technician

*P. Beck*

Pete Beck / Apprentice Gas Technician

# Summary of Changes To the Gas Technician Apprenticeship 2006

## Guidelines section:

Adjusted the format to make this section a more user friendly read.  
Removed LOP from the document.

## 0-6 Month Step:

1. **Removed** all welding courses from the program.

Reasoning: Gas welding of piping is no longer a primary job function. In the past twenty years process control systems have migrated to electronic control. Therefore pneumatic systems are no longer in demand. Without a continuous volume of welding work, Tech's do not get OJT or enough practice of the craft to maintain proficiency.

2. **Added** App. Measurement and Control mechanic Primary in place of welding as "in class academic course.
3. **Added** TPC 307 Basic Hydraulics to balance home study course load. Moved this course up from 7-12 step.
4. **Removed requirement for Refresher Mathematics from the program.**  
Reasoning: The Ad-hoc committee poled many of the Tech's and all thought that the course was redundant due to the amount of math required to pass the ACT and the entry exam. However, It is optional, if a tech wants to take more math the course is available upon request.

## 7-12 Month step:

1. **Moved** App. Measurement and Control Mechanic Secondary Course up from 13-18 month step to balance hours of formal "classroom" academics.
2. **Moved** TPC 307 to 0-6 month step.

### **13-18 Month Step:**

- 1 **Moved** Gas Measurement and Control final up from 25-30 month step to balance hours of formal academics.
- 2 **Moved** TPC 201 Basic Electricity up from 19-24 month step to provide exposure to electricity and as prerequisite for upcoming formal electrical courses.  
(also balances home study required hours)
- 3 **Moved** TPC 229 Final Control Elements up from 19-24 mo. Step per request of JATC

### **19-24 Month Step:**

**Grouped PSOS-0072 2-day Electrician Math , PSOS-0062 Hands-on Electricity, and PSOS-0063 Electronics for Electricians in this step for consistency**

- 1 **Added** 2day Electrician math (PSOS-0072) as prerequisite for up coming Electrical classes.
- 2 **Replaced** 4 week basic electricity course with 2 week Hands-on basic electricity (PSOS-0062) per request of Joe Spec.
- 3 **Replaced** 2 week electronics course with 1 week Electronics for Electricians (PSOS-0063) per request of Joe Spec.
- 4 **Moved** APP. Measurement and Control Mechanic Final Course up from 25-30 month step.
- 5 **Moved** TPC 201 Understanding Basic Electricity up to 13-18 month step.
- 6 **Moved** TPC 202 Using and Maintaining Batteries, and TPC 204 Using Electrical Measuring Instrumentation Per request of JATC

### **25-30 Month Step:**

- 1 **Added** on week M&C Gas SCADA Pack 32 (GAS-0183) to balance hours of formal "classroom" academics.
- 2 **Added** 1 week PLC (programmable logic control) as formal academic course.
- 3 **Added** one week Gas Chromatograph (GAS-0011) to balance hours of formal "classroom" academics.
- 4 **Added TPC courses** 202, 204, 206, and 217 to balance home study hours and cover frequently installed technology and return program to original format.
- 5 **Moved** TPC 209 Understanding Basic A/C Control Equipment, 210 Developing Electrical Troubleshooting Skills, and 235 Computers in process control Per request of JATC

### **31-36 Month Step:**

**Moved all training from this step to provide rounding out period**

GENERAL CONSTRUCTION GAS DEPARTMENT  
GUIDELINES FOR THE  
APPRENTICE GAS TECHNICIAN PROGRAM

1. Objective of the Apprentice Gas Technician Program

The need for trained and fully qualified employees to accomplish the duties of the Journeyman Gas Technician in a manner consistent with company's standards of competence, safety and performance has resulted in this training program. This program is designed to provide the apprentice with the means to attain the required knowledge and skills, self-confidence and correct safety practices needed to become a Journeyman Gas Technician.

2. Training

Admittance into the apprenticeship program is gained by a minimum score of 75% on the arithmetic computation test (ACT) and a minimum score of 70% on the Apprentice Gas Technician entrance examination.

The apprenticeship is three years long, divided into six time periods, each 6 months long, coinciding with the wage steps. An attached schedule defines the assignment of duties and work procedures which shall be provided in each of the time periods. The minimum amount of time or units of work indicated on the schedule is provided to develop the apprentice's proficiency in the duty or work procedure.

The amount of "on-the-job" training, as defined by this schedule, shall be dependent on the amount of time such duties are performed by the journeymen in the department. Duties not performed by journeymen in the department, and therefore not available in the training program, shall be noted in the training record. Progression through the apprenticeship or advancement to journeyman shall not be deterred should there be deficiencies caused by such situations

The schedule also specifies training periods in which the apprentice shall receive related academic or in-class training courses.

The program will be administered in accordance with the guidelines of the Master Apprenticeship Agreement.

Positions will be filled with the senior qualified employee in the next lower classification. Employees currently in the Measurement and Control group will be eligible.

A. General Guidelines

1. Assignment of academic training shall be given to the apprentice as early in each training period as is practicable.
2. Hours shown on the On the Job Training schedule do not include travel time to reach the location where training is to be given; However, the hours shown do provide for the necessary preparation of tools and equipment.
3. The apprentice shall be trained by working with a qualified journeyman.
4. Progressive work experience will be provided throughout all of the periods of the apprenticeship in accordance with the attached schedule.
5. Time will be provided during working hours for testing and answering of questions pertaining to the academic assignments. This time will be provided as needed. The on the job training card will be used to record any time spent on these activities.
6. The work assignments in each period of training shall provide the apprentice with basic knowledge of, and confidence in, the equipment and the work procedures. Assignments shall become progressively more complex as the apprentice gains knowledge and capability. If work is unavailable at immediate headquarters, the apprentice will be transferred to gain required training.
7. The apprentice scheduled to attend centralized training programs (classroom) shall be given at least 4 weeks notice of such schedules. Such notifications shall be made by the apprentices' immediate exempt supervisor.
8. Testing:
  - a. A test will be given at the conclusion of each course. Should the apprentice fail to achieve a passing score, written notice of the deficient areas will be given to the apprentice.
  - b. After failure, but no sooner than one month following the date of the initial test, the apprentice shall be allowed to retake the test upon request. A maximum of two retests will be allowed, spaced no less than one month apart.
  - c. The apprentice shall complete the course and pass the agreed-upon tests not later than the end of the sixth month of the current training period, regardless of the number of retests requested. Failure to meet this Standard of Achievement will be cause for removal from the classification in accordance with the Master Apprenticeship Agreement.
9. Records:

It shall be the responsibility of each apprentice and his immediate supervisor to maintain training records. The On the Job Training assignment chart will be used to keep daily records of on the job experience. The immediate supervisor will review and initial this chart daily. Upon completion, each periodic record shall be submitted to the training coordinator.

10. Academic Performance:

If an apprentice does not maintain an acceptable on-the-job training record, or academic performance level, notification shall be given in accordance with the Master Apprenticeship Agreement.

### ACADEMIC ASSIGNMENTS

CLASSROOM/LAB COURSES (PG&E)

		Training Period	0-6	7-12	13 -18	19-24	25-30	31-36	Totals
1	GAS-0113	App. Gas Measurement & Control Mechanic - Primary Session	80						80
2	GAS-0114	App. Gas Measurement & Control Mechanic - Secondary Session		80					80
3	GAS-0115	App. Gas Measurement & Control Mechanic - Final			80				80
4	PSOS-0072	Two (2) Day Electrician Math				20			20
5		Hands-on Electricity				80			80
6		Electronics				40			40
7	GAS 0183	M&C SCADA Pack-32					40		40
8	GAS 0011	Chromatographs					40		40
9		Programmable Logic Control					40		40
<b>ACADEMIC TOTAL</b>									<b>500</b>



## HOME STUDY COURSES

Training Period			0-6	7-12	13-18	19-24	25-30	31-36	Totals
1	TPC 101	Reading Blueprints	8						8
2	TPC 102	Reading Schematics & Symbols	16						16
3	TPC 307	Understanding Basic Hydraulics	16						16
4	TPC 271	Introduction to Process Control		12					12
5	TPC 272	Foundations of Measurement Instrumentation		16					16
6	TPC 309	Basis Pneumatics		18					18
7	TPC 232	Working with Controllers			12				12
8	TPC 110	Developing Troubleshooting Skills			16				16
9	TPC 201	Understanding Basic Electricity & Electronics			20				20
10	TPC 229	Final Control Elements			12				12
11	TPC 205	Providing Electrical Protection & Safety				18			18
12	TPC 280	Safety, Calibration and Testing				16			16
13	TPC 202	Using and Maintaining Batteries				14			14
14	TPC 204	Using Electrical Measuring Instrumentation				16			16
15	TPC 206	Operating & Maintaining DC Equipment and Controls					6		6
16	TPC 231	Analytical Instrumentation					4		4
17	TPC 209	Understanding Basic A/C Control Equipment					18		18
18	TPC 210	Developing Electrical Troubleshooting Skills					18		18
19	TPC 235	Computers in Process Control					18		18
<b>TPC TOTAL</b>									<b>274</b>

**ON THE JOB TRAINING SCHEDULE  
AND REQUIRED HOURS**

	<b>Training Period</b>	<b>0-6</b>	<b>7-12</b>	<b>13-18</b>	<b>19-24</b>	<b>25-30</b>	<b>31-36</b>	
								<b>Totals</b>
<b>1</b>	<b>Safety and First Aid</b>	6	6	6	6	6	6	36
<b>2</b>	<b>Crew Truck Housekeeping</b>	20	10	10				40
<b>3</b>	<b>Material Ordering</b>			5	5	5	5	20
<b>4</b>	<b>Blueprint Reading</b>	5	5	5	5	5	5	30
<b>5</b>	<b>Tubing - - Layout and Install</b>	10	10	10	10			40
<b>6</b>	<b>Gas Supplies -- Installation</b>		10	10	10			30
<b>7</b>	<b>Regulators and Relief Valves</b>		10	10	10			30
<b>8</b>	<b>Control Piping - - Layout and Install</b>		10	10	10			30
<b>9</b>	<b>Valve Actuators and Control Equipment</b>			10	10	10	10	40
<b>10</b>	<b>Pneumatic Controls Testing &amp; Calib.</b>				10	10	10	30
<b>11</b>	<b>Electrical Codes</b>			5	5	5	5	20
<b>12</b>	<b>Conduit - - Layout and Install</b>			10	10	10	10	40
<b>13</b>	<b>Wiring - - Installation</b>		10	10	10	10	10	50
<b>14</b>	<b>Electrical and Electronic Equipment</b>				10	10	10	30
<b>15</b>	<b>Electronic Controls Testing &amp; Calib.</b>			10	10	10	10	40
<b>16</b>	<b>BTU Measurement</b>						10	10
<b>17</b>	<b>Report and Record Keeping</b>	6	6	6	6	6	6	36
<b>18</b>	<b>Job Planning and Leading</b>				10	10	10	30
							<b>OJT TOTAL</b>	<b>582</b>

# APPRENTICE GAS TECHNICIAN

## 0-6 MONTHS

**ACADEMIC ASSIGNMENTS:** HOURS

**CLASSROOM/LAB COURSES (PG&E):**

GAS-0113 App. Gas Measurement & Control Mechanic:- Primary Session 80

**HOME STUDY COURSES:**

TPC 101 Reading Blueprints  
Lessons 1, 6, 7, and 8 8

TPC 102 Reading Schematics and Symbols  
Lessons 1, 2, 3, 4, 5, 6, 7, & 8 16

TPC 307 Understanding Basic Hydraulics  
Lessons 1, 2, 3, 4, 5, 6, 7, & 8 16

**ON THE JOB ASSIGNMENTS:**

Safety and First Aid 6  
Crew Truck and Job Site Housekeeping 20  
Blueprint Reading 5  
Instrument Tubing Layout and Installation 10  
Reports and Record Keeping 6

Classroom = 80  
Home Study =40  
OJT Hours = 47

# APPRENTICE GAS TECHNICIAN

7-12 MONTHS

## ACADEMIC ASSIGNMENTS:

HOURS

### CLASSROOM/LAB COURSES (PG&E):

Gas-0114      App. Gas Measurement & Control Mechanic: Secondary Session      80

### HOME STUDY COURSES:

TPC 271 (prev 221)	Introduction to Process Control All Lessons	12
TPC 272 (prev 222)	Foundations of Measurement Instrumentation All Lessons	16
TPC 309	Basic Pneumatics Lessons: 1,2,3,4,5, 7,8,9, and 10	18

### ON THE JOB ASSIGNMENTS:

Safety and First Aid	6
Crew Truck and Job Site House Keeping	10
Blueprint Reading	5
Tubing; Layout and Installation	10
Gas Supplies - Installation	10
Regulators and Relief Valve Installation	10
Control Piping; Layout and Installation	10
Wiring Installation	10
Report and Record Keeping	6

Classroom = 80

Home Study= 46

OJT Hours = 77

# APPRENTICE GAS TECHNICIAN

13-18 MONTHS

## ACADEMIC ASSIGNMENTS:

HOURS

### CLASSROOM/LAB COURSES (PG&E):

Gas-0115 App. Gas Measurement & Control Mechanic: Final 80

### HOME STUDY COURSES:

TPC 232 Working with Controllers  
All Lessons 12

TPC 110 Developing Troubleshooting Skills  
Lessons: 1,2,3,4,5,6,7 & 8 16

TPC 201 Understanding Basic Electricity & Electronics  
All Lessons 20

TPC 229 Final Control Elements  
All Lessons 12

### ON THE JOB ASSIGNMENTS:

Safety and First Aid	6
Crew Truck and Job Site House Keeping	10
Material Ordering	5
Blueprint Reading	5
Tubing; Layout and Installation	10
Gas Supplies - Installation	10
Regulators and Relief Valve Installation	10
Control Piping; Layout and Installation	10
Valve Actuators and Control Equipment	10
Electrical codes	5
Conduit - Layout and Install	10
Wiring / Installation	10
Electronic Controls - Testing & Calibration	10
Report and Record Keeping	6

Classroom = 80

Home Study =60

OJT Hours =117

# APPRENTICE GAS TECHNICIAN

19-24 MONTHS

ACADEMIC ASSIGNMENTS:		HOURS
CLASSROOM/LAB COURSES		
(PSOS-0072) 2 day Electrician Math,		20
Hands-on Electricity		80
Electronics		40
HOME STUDY COURSES:		
TPC 205	Providing Electrical Protection and Safety Lessons 1, 2, 3, 4, 5, 6, 7, 8 and 9	18
TPC 280 (prev 230)	Safety, Calibration, and Testing All Lessons	16
TPC 202	Using and Maintaining Batteries Lessons 1, 2, 6, 7, 8, 9 and 10	14
TPC 204	Using Electrical Measuring Instrumentation Lessons 1,2,3,4,5,6, 8, & 9	16
ON THE JOB ASSIGNMENTS:		
Safety and First Aid		6
Material Ordering		5
Blueprint Reading		5
Tubing; Layout and Installation		10
Gas Supplies - Installation		10
Regulators and Relief Valve Installation		10
Control Piping; Layout and Installation		10
Valve Actuators and Control Equipment		10
Pneumatic Controls - Testing & Calibration		10
Electrical codes		5
Conduit - Layout and Install		10
Wiring / Installation		10
Electrical and Electronic Equipment		10
Electronic Controls - Testing & Calibration		10
Report and Record Keeping		6
Job Planning and Leading		10
Classroom = 140		
Home Study = 64		
OJT Hours = 137		

# APPRENTICE GAS TECHNICIAN

25-30 MONTHS

## ACADEMIC ASSIGNMENTS:

HOURS

### CLASSROOM / LAB COURSES (PG&E):

Gas 0183	M&C SCADA Pack-32	40
Gas-0011	Chromatographs	40
	Programmable Logic Control	40

## HOME STUDY COURSES:

TPC 206	Operating & Maintaining DC Equipment. & Controls Lessons 6,8, & 9	6
TPC 231	Analytical Instrumentation 4&5	4
TPC 209	Understanding Basic A/C Control Equipment Lessons 1,2,3,4,5,6,7,9, &10	18
TPC 210	Developing Electrical Troubleshooting Skills Lessons 1,2,3,4,5,6,9, & 10	18
TPC 235	Computer in Process Control	4

## ON THE JOB ASSIGNMENTS:

Safety and First Aid	6
Material Ordering	5
Blueprint Reading	5
Valve Actuators and Control Equipment	10
Pneumatic Controls - Testing & Calibration	10
Electrical codes	5
Conduit - Layout and Install	10
Wiring / Installation	10
Electrical and Electronic Equipment	10
Electronic Controls - Testing & Calibration	10
Report and Record Keeping	6
Job Planning and Leading	10

Classroom = 120  
Home Study = 50  
OJT Hours = 97

APPRENTICE GAS TECHNICIAN

31-36 MONTHS

**ACADEMIC ASSIGNMENTS:**

HOURS

CLASSROOM/LAB COURSES (PG&E):  
NONE (Rounding out period)  
HOME STUDY COURSES:

NONE

**ON THE JOB ASSIGNMENTS:**

Safety and First Aid	6
Material Ordering	5
Blueprint Reading	5
Valve Actuators and Control Equipment	10
Pneumatic Controls - Testing & Calibration	10
Electrical codes	5
Conduit - Layout and Install	10
Wiring / Installation	10
Electrical and Electronic Equipment	10
BTU Measurement	10
Electronic Controls - Testing & Calibration	10
Report and Record Keeping	6
Job Planning and Leading	10

Home Study= none = rounding out period  
OJT Hours =107