



LETTER AGREEMENT NO. 98-31-PGE

IBEW



PACIFIC GAS AND ELECTRIC COMPANY
INDUSTRIAL RELATIONS DEPARTMENT
2850 SHADELANDS DRIVE, SUITE 100
WALNUT CREEK, CALIFORNIA 94598
(510) 974-4282

INTERNATIONAL BROTHERHOOD OF
ELECTRICAL WORKERS, AFL-CIO
LOCAL UNION 1245, I.B.E.W.
P.O. BOX 4790
WALNUT CREEK, CALIFORNIA 94596
(510) 933-6060

MEL BRADLEY, MANAGER OR
DAVID J. BERGMAN, CHIEF NEGOTIATOR

JACK McNALLY, BUSINESS MANAGER

April 15, 1998

Local Union No. 1245
International Brotherhood of
Electrical Workers, AFL-CIO
P. O. Box 4790
Walnut Creek, CA 94598

Attention: Mr. Jack McNally, Business Manager

Dear Mr. McNally:

Company proposes to modify the Apprentice Equipment Mechanic guidelines agreed to in Letter Agreement 97-16 by revising the section on the Welding School. Apprentice Equipment Mechanics currently receive welding training in the Company's Apprentice Fitter Training School, which concentrates on pipe welding and includes skills not used by Equipment Mechanics.

Since Equipment Mechanics perform very little oxy-acetylene welding, the Company is proposing to reduce the Primary (Oxy-Acetylene) Course from 80 hours to 40 hours, continue the 80-hour Secondary Course which covers shielded metal arc welding and gas metal arc welding, and add a 40-hour Final Course on flux cored arc welding and gas metal arc welding.

Company is specifically proposing to replace the Welding School Section on pages 8-15 of the Guidelines with the attached Welding School Section.

This proposal has been discussed with the Joint Apprenticeship and Training Committee.

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

Very truly yours,

PACIFIC GAS & ELECTRIC COMPANY

By: 
Chief Negotiator

INTERNATIONAL BROTHERHOOD OF
ELECTRICAL WORKERS, AFL-CIO

By: 
Business Manager

April 15, 1998

Apprentice Equipment Mechanic, 1258

Welding Training

(for Division & General Construction)

Welding School

At some time during the first 12 months of the training program you will be scheduled to attend the following 3 welding courses in San Ramon:

Primary Course (40 hours) - oxygen acetylene welding, heating, and cutting, plasma arc cutting

Secondary Course (80 hours) - shielded metal arc welding (SMAW), gas metal arc welding (GMAW),

Final Course (40 hours) - flux cored arc welding (FCAW), gas metal arc welding (GMAW)

Lodging will be provided for you at the San Ramon Learning Center. Reservations will be made for you.

Daily lunches are available at the cafeteria at the San Ramon Learning Center.

You are requested to bring suitable work clothes for the shop training. Any special clothing or equipment required for welding will be provided by the school. You may be requested by the school instructor to shorten your hair or beard, if in his/her opinion, they present a hazard to your safety.

Primary Course (40 hours):

Oxygen Acetylene Welding, Heating, and Cutting

Shop Exercises & Practices:

1. Bead-on-Plate (10 gage) w/ rod- flat position
2. Tee Joint, fillet weld w/ plate- flat(f) & vertical(v) positions
3. Fillet weld w/ $\frac{3}{4}$ & 1-1/4-inch pipe onto plate- f
4. Fillet weld w/ pipe to pipe (4-inch sleeve weld)- rolled
5. Fillet weld w/ $\frac{3}{4}$ & 1-1/4-inch pipe onto 2-inch pipe- f
6. Butt Joint w/ plate- f, & v
7. Butt Joint w/ 2 & 3-inch pipe to pipe, rolled
8. oxygen acetylene cutting, on plate & pipe, piercing, beveling
9. oxygen acetylene scarfing (frozen nuts, pins, & bolts)
10. oxygen acetylene heating with a multi-flame heating tip

Classroom:

Welcome, Introductions, Welding Training Program, etc.

Process principals/ performance, Forehand welding technique

Equipment setup and shut-down

"Oxy-Fuel Safety, It's up to you", video by Victor Equipment Co.

Hand-out: "Oxy-Fuel Welding, Cutting, & Heating Guide" by Victor

Personal Safety: 100% cotton clothing, grinders, ear plugs, green cap, knee pads, work boots, gloves goggles, eye protection, etc.

American Welding Society: terms, welding rod designation, etc.

Housekeeping: class hours, lunch, breaks, Pink Slip procedure, earthquake, fire, emergencies, etc.

Getting Started in the Shop, walk through, eye wash, fire extinguisher, etc.

Joint and weld designs, AWS welding positions, AWS master chart of welding processes

Theory, equipment and practice of Plasma Arc Cutting

Plasma Arc Cutting

Shop Exercises & Practices:

9. Plasma Arc Cutting, equipment safety, setup, and shutdown

10. Plasma arc cutting, on aluminum or stainless steel plate & pipe

I. Standards of Achievement for Primary Course

Welding Proficiency Test (visual and destructive):

a. Tee joint with 10 gage plate, one pass fillet weld in the flat and vertical positions

b. Tee joint 3/4-inch pipe onto 2-inch pipe, one pass fillet weld in the flat position

c. Butt weld 2-inch pipe in flat position, rolled

Written Test:

d. Process Principal, Equipment, and Safety for:

1. Oxygen Acetylene Welding and Cutting, and

2. Plasma Arc Cutting

Secondary Course (80 hours):

Shielded Metal Arc Welding (SMAW)

Shop Exercises & Practices:

1. E6010, bead-on-plate, flat position
2. E6010, Tee Joint, fillet weld w/ 1/4-inch plate, multi-pass- f, v, & oh(overhead)
3. E7018, bead-on-plate, f
4. E7018, Tee Joint, multi-pass fillet weld w/plate- f, v, & oh
5. E7018, Butt Joint, groove weld on plate w/ backing strip- f, v, & oh
6. E7024, Tee joint, multi-pass fillet weld w/plate- f

I. Standard of Achievement for Secondary Course

Welding Proficiency Tests (visual and destructive)-

- a. E6010, Tee Joint, multi-pass fillet weld w/ plate in f, v, & oh
- b. E7018, Butt Joint, groove weld on plate w/ backing strip in f, v, & oh
- c. E7018, Tee Joint, fillet weld w/ plate in f, v, & oh

Classroom:

Welding electrode designation, yield and tensile strength
ASTM Materials designation, pipe/ plate grades, filler metal and plate material compatibility, Process principal/ performance, Equipment set-up & welding settings, polarity, personal safety, welding technique, terms, etc.

Shop Exercises & Practices:

7. E7018, Tee Joint, fillet weld 2-inch pipe to plate- f, v, & oh
8. E7018, Tee Joint, fillet weld, 2-inch pipe to pipe- f & v

II. Standards of Achievement for Secondary Course

Welding Proficiency Test: (visual and destruction)

d. E7018, Tee Joint fillet weld 2-inch pipe to plate- f, v, & oh

e. E7018, Tee Joint, fillet weld 2-inch pipe to pipe- f & v

Written Test:

Process Principal, Equipment, and Safety for SMAW

Gas Metal Arc Welding (GMAW)

Shop Exercises & Practices:

9. Using E70S-6 electrode and 75% Ar /25% CO2 shielding gas, vertical-up welding direction

10. Tee Joint, fillet weld w/plate- f, v, & oh

11. Butt Joint, groove weld on plate w/ backing strip- f, v, & oh

12. Tee Joint, fillet weld 2-inch pipe to plate- f, v,

13. Tee Joint, fillet weld, 2-inch pipe to pipe- f & v

Classroom:

Process principal, equipment components and setup, effects of different shielding gases, welding wire designation, advantages and disadvantages of GMAW to SMAW, etc.

III. Standards of Achievement for Secondary Course

Welding Proficiency Tests (visual and Destructive):

f. E70S-6, Butt Joint, groove weld on plate w/ backing strip in f, v, & oh

g. E70S-6, Tee Joint, fillet weld on plate in f, v, & oh

Written Test:

Process principal, Equipment, and Safety for GMAW

Final Course (40 hours):

Flux Cored Arc Welding (FCAW)

Shop Exercises & Practices:

1. Use FCAW wire with auxiliary shielding gas, vertical-up welding direction
2. Tee Joint, fillet weld w/plate- f & v
3. Butt Joint, groove weld on plate with backing strip- f & v

I. Standards of Achievement for Final Course

Welding Proficiency Tests (visual and destructive):

- a. Tee Joint, fillet weld with plate in flat & vertical positions
- b. Butt Joint, groove weld on plate with backing strip- f & v

Gas Metal Arc Welding

Shop Exercises & Practices:

3. Butt weld w/ thin wall tubing(3/32-inch thickness)- f
4. Lap weld w/ thin wall tubing- f

II. Standards of Achievement for Final Course

Welding Proficiency Test (visual and Destructive):

- c. Butt weld on thin wall tubing- f
- d. Lap weld on thin wall tubing- f

Written Test:

Process principal/ performance, Equipment, and Safety