



LETTER AGREEMENT NO. R1-93-74-PGE

IBEW



PACIFIC GAS AND ELECTRIC COMPANY
INDUSTRIAL RELATIONS DEPARTMENT
201 MISSION STREET, ROOM 1513A
MAIL CODE P15A
P.O. BOX 770000
SAN FRANCISCO, CALIFORNIA 94177
(415) 973-3425

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

RONALD L. BAILEY, MANAGER OR
DAVID J. BERGMAN, DIRECTOR AND CHIEF NEGOTIATOR

JACK McNALLY, BUSINESS MANAGER

October 11, 1993

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

Attention: Mr. Jack McNally

Gentlemen:

Pursuant to Title 109 of the Physical Agreement, Company proposes Union participation in revising and updating the Equipment Mechanic Apprenticeship program. At the last Joint Apprenticeship Committee Meeting the parties agreed that it would be appropriate to form a joint study committee to examine the current program. Please contact the Company when Union members have been selected so that the joint committee can meet to discuss modifications to the apprenticeship program.

The joint committee's recommendations should be submitted to Joint Apprenticeship and Training Committee for final approval.

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: 
Director and Chief Negotiator

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

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

Oct 20, 1993

By: 
Business Manager



ATTACHMENT "A"
REVISION 1; 11/9/90
SECTION VI

APPRENTICE MACHINIST TRAINING PROGRAM

COURSE: Machine Tool Practices.

TEXT: Machine Tool Practices, Kibbe/Neely/Meyer/White, Third Edition.

SCHEDULED TIME FOR COMPLETION: Twenty Four (24) Months.

COURSE PROCEDURE:

1. Textbook lesson assignments: Read the assigned lesson material in the textbook. Complete the appropriate "Self-Tests" and review them with your Instructor.
2. Scheduled Examinations: Per course outline.
3. All lesson and scheduled examinations are "OPEN BOOK".

CHANGED FROM
"CLOSED BOOK"

SECTION VI

Text - Machine Tool Practices Section I - TURNING MACHINES

Lesson No.	Subject / Title	Section / Unit
1	The Engine Lathe.	Sec. I , Unit 1
2	Toolholders and Toolholding for the Lathe.	Sec. I , Unit 2
3	Cutting Tools for the Lathe. (Review Section "F"; Preparation For Machining Operations.)	Sec. I , Unit 3
4	Lathe Spindle Tooling.	Sec. I , Unit 4
5	Operating the Machine Controls.	Sec. I , Unit 5
6	Facing and Center Drilling.	Sec. I , Unit 6
7	Turning Between Centers.	Sec. I , Unit 7
8	Alignment of the Lathe Centers.	Sec. I , Unit 8
9	Other Lathe Operations.	Sec. I , Unit 9
10	Sixty Degree Thread Information and Calculations.	Sec. I , Unit 10
11	Cutting Unified External Threads.	Sec. I , Unit 11
12	Cutting Unified Internal Threads.	Sec. I , Unit 12
13	Cutting Tapers.	Sec. I , Unit 13
14	Using Steady and Follower Rests.	Sec. I , Unit 14
15	Additional Thread Forms.	Sec. I , Unit 15
16	Cutting Acme Threads on the Lathe.	Sec. I , Unit 16

Examination No. 1 , Covering Section I ; Lessons 1 thru 16

SECTION VI

Text - Machine Tool Practices Section J - VERTICAL MILLING MACHINES

Lesson No.	Subject / Title	Section / Unit
17	The Vertical Spindle Milling Machine.	Sec. J , Unit 1
18	Cutting Tools and Cutter Holders for the Vertical Milling Machine.	Sec. J , Unit 2
19	Setups on the Vertical Milling Machine.	Sec. J , Unit 3
20	Vertical Milling Machine Operations.	Sec. J , Unit 4
21	Using the Offset Boring Head.	Sec. J , Unit 5

Examination No. 2 , Covering Section J ; Lessons 17 thru 21

Text - Machine Tool Practices
Section K - HORIZONTAL MILLING MACHINES

Lesson No.	Subject / Title	Section / Unit
22	Plain and Universal Horizontal Milling Machines.	Sec. K , Unit 1
23	Types of Spindles, Arbors, and Adapters.	Sec. K , Unit 2
24	Arbor-Driven Milling Cutters. Machine.	Sec. K , Unit 3
25	Work-Holding Methods and Standard Setups.	Sec. K , Unit 4
26	Machine Setup and Plain Milling.	Sec. K , Unit 5
27	Using Side Milling Cutters.	Sec. K , Unit 6
28	Using Face Milling Cutters on the Horizontal Milling Machine.	Sec. K , Unit 7

Examination No. 3 , Section K ; Lessons 22 Thru 28.

Text - Machine Tool Practices
Section L - ROTARY TABLES AND INDEXING DEVICES

Lesson No.	Subject / Title	Section / Unit
29	Setup and Operation of Indexing Heads and Rotary Tables.	Sec. L , Unit 1
30	Direct and Simple Indexing.	Sec. L , Unit 2
31	Angular Indexing. Machine.	Sec. L , Unit 3

Text - Machine Tool Practices
Section M - GEARS AND GEAR CUTTING

Lesson No.	Subject / Title	Section / Unit
32	Introduction to Gears.	Sec. M , Unit 1
33	Spur Gear Terms and Calculations.	Sec. M , Unit 2
34	Cutting a Spur Gear.	Sec. M , Unit 3
35	Gear Inspection and Measurement.	Sec. M , Unit 4

Examination No. 4 , Covering Sections L & M ; Lessons 29 thru 35

Text - Machine Tool Practices
Section N - GRINDING AND ABRASIVE MACHINING PROCESSES.

Lesson No.	Subject / Title	Section / Unit
35 36	Selection and Identification of Grinding Wheels.	Sec. N , Unit 1
38 37	Trueing, Dressing, and Balancing of Grinding Wheels.	Sec. N , Unit 2
37 38	Grinding Fluids.	Sec. N , Unit 3
38 39	Horizontal Spindle Reciprocating Table Surface Grinders.	Sec. N , Unit 4
39 40	Work-Holding on the Surface Grinder.	Sec. N , Unit 5
40 41	Using the Surface Grinder.	Sec. N , Unit 6
41 42	Problems and Solutions in Surface Grinding.	Sec. N , Unit 7
42 43	Center-Type Cylindrical Grinders.	Sec. N , Unit 8
43 44	Using the Cylindrical Grinder.	Sec. N , Unit 9
44 45	Universal Tool and Cutter Grinder.	Sec. N , Unit 10

Text - Machine Tool Practices
Section O - ADVANCED MACHINING PROCESSES.

Lesson No.	Subject / Title	Section / Unit
45 46	Nontraditional Machining Processes.	Sec. O , Unit 4

Examination No. 5 , Covering Sections N & O ; Lessons 35 thru 46.

FINAL EXAMINATION COVERING ENTIRE M.T.O. COURSE.

ATTACHMENT "B"
REVISION 1; 11/7/90

SECTION VIII

APPRENTICE MACHINIST TRAINING PROGRAM
APRENTICE MECHANIC-RIGGER TRAINING PROGRAM
APPRENTICE WELDER TRAINING PROGRAM

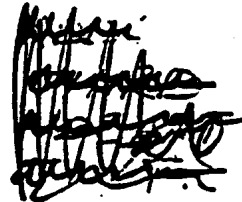
COURSE: Basic Tools and Equipment.

TEXT:

1. Machine Tool Practices, Kibbe/Neely/Meyer/White, Third Edition.
2. Oxyacetylene Welding, Cutting and Brazing, Hobart School of Welding Technology, EW-269:OAW 2nd Edition.
3. Sheided Metal-Arc Welding, Hobart School of Welding Technology, EW-269:SMAW B 2nd Edition.

COURSE PROCEDURE:

1. Textbook lesson assignments: Read the assigned lesson material in the textbook. Complete the appropriate "Self-Tests" and review them with your Instructor.
2. All lesson and Scheduled examinations are "OPEN BOOK".



Basic Mobile Equipment, Cranes,
Rigging and Scaffolds.



Lesson No.	Subject / Title	Mech. Maint. Lesson No.
1.	Forklift Truck Operation.	MG0844 & Test
2.	Basic Scaffolding.	MG0850 & Test
3.	Rigging Fundamentals.	MG0801 & Test
4.	Rigging Set-up and Dismantling.	MG0820 & Test
5.	Introduction to Plant Cranes and Plant Crane Procedures.	MG0826 & Test

Text - Machine Tool Practices
Section A - INTRODUCTION.

Lesson No.	Subject / Title	Section / Unit
6	Shop Safety.	Sec. A , Unit 1
7	Mechanical Hardware.	Sec. A , Unit 2
8	Reading Drawings.	Sec. A , Unit 3

Text - Machine Tool Practices
Section B - HAND TOOLS.

Lesson No.	Subject / Title	Section / Unit
9	Arbor and Shop Presses.	Sec. B , Unit 1
10	Work-Holding and Hand Tools.	Sec. B , Unit 2
11	Hacksaws.	Sec. B , Unit 3
12	Files.	Sec. B , Unit 4
13	Hand Reamers.	Sec. B , Unit 5
14	Identification and use of Taps.	Sec. B , Unit 6
15	Tapping Procedures.	Sec. B , Unit 7
16	Thread-Cutting Dies and their Uses.	Sec. B , Unit 8
17	Off-Hand Grinding.	Sec. B , Unit 9

Examination No. 1 , Covering Sections A & B ; Lessons ~~6~~ 4 thru ~~12~~ 17

Text - Machine Tool Practices
Section C - DIMENSIONAL MEASUREMENT

Lesson No.	Subject / Title	Section / Unit
18	Systems of Measurement.	Sec. C , Unit 1
19	Using Steel Rules.	Sec. C , Unit 2
20	Using Vernier, Dial, and Digital Instruments for Direct Measurements.	Sec. C , Unit 3
21	Using Micrometer Instruments.	Sec. C , Unit 4
22	Using Comparison Measuring Instruments.	Sec. C , Unit 5
23	Using Gage Blocks.	Sec. C , Unit 6
24	Using Angular Measuring Instruments.	Sec. C , Unit 7
25	Tolerances and Fits.	Sec. C , Unit 8

Text - Machine Tool Practices
Section D - MATERIALS.

Lesson No.	Subject / Title	Section / Unit
26	Selection and Identification of Steels.	Sec. D , Unit 1
27	Selection and Identification of Nonferrous Metals.	Sec. D , Unit 2
28	Hardening, Case Hardening, and Tempering.	Sec. D , Unit 3
29	Annealing, Normalizing, and Stress Relieving.	Sec. D , Unit 4
30	Rockwell and Brinell Hardness Testers.	Sec. D , Unit 5

Examination No. 2 , Covering Sections C & D ; Lessons ^{18/19} 18 thru ^{25/30} 25-30

Text - Machine Tool Practices
Section E - LAYOUT.

Lesson No.	Subject / Title	Section / Unit
31	Basic Semiprecision Layout Practice.	Sec. E , Unit 1
32	Basic Precision Layout Practice.	Sec. E , Unit 2

Text - Machine Tool Practices
Section F - PREPARATION FOR MACHINING OPERATIONS.

Lesson No.	Subject / Title	Section / Unit
33	Machinability and Chip Formation.	Sec. F , Unit 1
34	Speeds and Feeds for Machine Tools.	Sec. F , Unit 2
35	Cutting Fluids.	Sec. F , Unit 3
36	Using Carbides and Other Tool Materials.	Sec. F , Unit 4

Examination No. 3 , Covering Sections E & F ; Lessons ~~31~~³⁴ thru ~~36~~³⁶

Text - Machine Tool Practices
Section G - SAWING MACHINES.

Lesson No.	Subject / Title	Section / Unit
37	Using Reciprocating and Horizontal Band Cutoff Machines.	Sec. G , Unit 1
38	Abrasive and Cold Saws.	Sec. G , Unit 2
39	Preparing To Use the Vertical Band Machine.	Sec. G , Unit 3
40	Using the Vertical Band Machine.	Sec. G , Unit 4

Text - Machine Tool Practices
Section H - DRILLING MACHINES.

Lesson No.	Subject / Title	Section / Unit
41	The Drill Press.	Sec. H , Unit 1
42	Drilling Tools.	Sec. H , Unit 2
43	Hand Grinding of Drills on the Pedestal Grinder.	Sec. H , Unit 3
44	Operating Drilling Machines.	Sec. H , Unit 4
45	Coutersinking and Counterboring.	Sec. H , Unit 5
46	Reaming in the Drill Press.	Sec. H , Unit 6

Examination No. 4 , Covering Sections G & H ; Lessons ³⁷ thru ⁴⁶

Text - Hobart Workbooks and Video.

Lesson No.	Subject / Title	Mech. Maint. Lesson No.
47	Common Arc Welding Processes.	MM2110 & Test
48	Basics of Oxyacetylene Welding Cutting and Brazing.	MM2111 & Test
49	Basics of Shielded Metal-Arc Welding.	MM2112 & Test

DCPP APPRENTICE MACHINIST PROGRAM COURSE MAP

	(Machinist Section VI)	(Common)	(Common)
First Six Months: (0 thru 6)	Machine Tool Operation; Lessons 1-5 <u>OR</u> Machine Tool Practices; Lessons 1-16	Basic Tools and Equipment Lessons 1-17	Power Plant Fundamentals Lesson 1-3
Second Six Months: (7 thru 12)	Machine Tool Operation; Lessons 6-11 <u>OR</u> Machine Tool Practices; Lessons 17-21	Basic Tools and Equipment Lessons 18-30	Mathematics
Third Six Months: (13 thru 18)	Machine Tool Operation; Lessons 12-19 <u>OR</u> Machine Tool Practices; Lessons 22-28	Basic Tools and Equipment Lessons 31-49	Mechanical Drawing
Fourth Six Months: (19 thru 24)	Machine Tool Operation; Lessons 20-31 <u>OR</u> Machine Tool Practices; Lessons 29-35	Power Plant Maintenance Lessons 1-13	Power Plant Fundamentals "SYSTEMS" *
Fifth Six Months: (25 thru 30)	Machine Tool Practices; Lessons 36-46	Power Plant Maintenance Lessons 14-28	Power Plant Fundamentals "SYSTEMS" *
Sixth Six Months: (31 thru 36)		Power Plant Maintenance Lessons 29-37	Power Plant Fundamentals "SYSTEMS" *

* Power Plant Fundamentals "SYSTEMS" conducted as available by G.O. Training Group.