LETTER AGREEMENT NO. 97-08-PGE

IBEW

PACIFIC GAS AND ELECTRIC COMPANY
INDUSTRIAL RELATIONS DEPARTMENT
375 NORTH WIGET LANE, SUITE 150
WALNUT CREEK, CALIFORNIA 94598
(510) 746-4282

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

January 9, 1997

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

Gentlemen:

In August 1995, Company and Union executed Letter Agreement 95-56-PGE to approve interim changes to the Apprentice Control Technician Training Program, including new courses and on the job training. On February 2, 1989 Company and Union executed a Letter Agreement concerning apprentice programs at Diablo Canyon Power Plant.

The Company is now proposing that a jointly recommended change to the Apprentice Control Technician and the Apprentice Electrical Control Technician programs for Diablo Canyon Power Plant be approved on an interim basis. These interim courses and OJT requirements are attached and will be in place until a complete review of the training programs is completed and approved by the Joint Apprenticeship and Training Committee. The JATC has approved the interim changes.

During this interim period, employees who fail a newly developed section of the training program will be reviewed on an individual case basis by the JATC. In the event that the JATC cannot resolve issues of those who fail, the employee will be subject to the requirements of the old Apprentice Control Technician or Apprentice Electrical Control Technician training programs.

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

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

Feb 18, 1997

By: _____
Business Manager

December 10, 1996

Diablo Canyon Power Plant

Apprentice Control Technicians:

Apprentice Electrical Control Technicians:

The company recognizes the broad range of skills in the journeyman Control Technical classification and acknowledges that it will take a period of time to fully train former Electricians and Instrument Repairmen in the Apprentice Control Technician training program. As a result the Company and Union have agreed to a training program that extends beyond the term of the apprenticeship.

Where the Company has failed to provide the required training or OJT and an employee has accrued 30 month's seniority as an Apprentice Control Technician, such employee will not be prevented from automatic progression to journeyman status. An employee who has not completed the required training or OJT due to inadequate performance resulting in not meeting the performance standards may have the term of the apprenticeship extended per the requirements of the Master Apprenticeship Agreement. Where the Company has failed to offer the required training or OJT during the period of the apprenticeship it will schedule them after the required period of the apprenticeship.

At Diablo Canyon Power Plant (DCPP) Nuclear Regulatory Commission regulations require that only qualified persons be assigned to work independently. The training and qualification programs are accredited by the National Academy for Nuclear Training. These programs require that knowledge and skills be verified in order to grant a qualification. Similarly the apprentice program is designed to provide the employee with knowledge and skills required to perform a task safely and efficiently. Where it can be shown to be reasonable, credit for OJT hours may be claimed for successfully completing a Task Performance Evaluation(TPE). The accredited program uses a TPE to verify skills. Knowledge must be verified as a prerequisite to performance of a TPE.

Letter Agreement 95-56-PGE removed the Computer Fundamentals and the Introduction To Nuclear Power sections from the apprenticeship except at DCPP. The Company proposes to remove these sections from the DCPP apprenticeship. To replace the Computer Fundamentals course the Company proposes to rewrite the Microprocessors course ICMB, emphasizing microprocessor theory of operation, use of logic test equipment, and troubleshooting techniques. This course will be approximately 80 hours in length and will be offered to all incumbent Apprentice Control Technicians at DCPP within three years of the completion of their apprenticeship. The Introduction to Nuclear Power will be incorporated into the Basic Sciences portion of the accredited training program. The commitment to the regulating agencies is that all incumbent journeymen will receive the training prior to March 1998, others will receive it within two years of their appointment to a Journeyman position.

Attached are the requirements for completing the Apprentice Control Technician and Apprentice Electrical Control Technician programs at DCPP. There are different program requirements based upon an individuals background, Electrician or Instrument Repairman. This agreement combines Letter Agreement 95-56-PGE and the accredited training program which is required by the regulating agencies at DCPP.

This agreement has been reached by a Company and Union Subcommittee. The undersigned sub-committee members indicate by their signature below they are in accord with the foregoing and agree thereto.

PACIFIC GAS & ELECTRIC COMPANY

Scott Roberts _____ (signature) 12-10 1996 (date)

Cher Anthony _____ (signature) 12-10 1996 (date)

INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL 1245

Ron Greenlee _____ (signature) 11DEC 1996 (date)

Mark Taylor _____ (signature) 12-10 1996 (date)

Dennis Romero _____ (signature) 12.10 1996 (date)

Ted Murray _____ (signature) 12-11- 1996 (date)

Requirements for ACT with Electrician Background
at
Diablo Canyon Power Plant

I. Computer Based Training

NOTE: Credit for the following courses may be granted either on the successful completion of the computer based training (CBT) or at Diablo Canyon Power Plant (DCPP) credit for the classes listed in parenthesis. Some courses may only be available in one of the listed formats, either CBT or classroom.

A. General Information:

1. Each topic (course) is divided into lessons.

2. The progression procedure through the computer based lessons are as follows:

   a) The apprentice is allowed three attempts to pass each lesson.
   b) An attempt is comprised of two "tries" to pass the lesson test.
   c) The apprentice is given two hours to take the lesson and test for each try.
   d) If the employee fails to pass the lesson test on the first attempt (first and second tries), the employee must wait thirty days before making a second attempt.
   e) If the employee fails to pass the lesson test on the second attempt (third and fourth tries), the employee must wait another thirty days before making a third attempt.
   f) If the apprentice fails to pass the lesson test on the third attempt (fifth and sixth tries), the apprentice's file will be referred to the Joint Apprenticeship Committee for review and decision.
   g) The apprentice may take other lessons in their line of progression while in the thirty day waiting periods.

B. Course Information:

The CBT portion of the Apprentice Control Technician and Apprentice Electrical Control Technician training program is composed of thirty-three lessons, representing a total of eighty-two (82) hours. It is recommended, but not required that the lessons be taken in the order listed below.

1. Temperature (IPSI01 Process Sensors)

   a) Filled Systems and Bi-metalic Thermometers
   b) Thermocouples
   c) RTD's and Thermisters

2. Pressure (IPSI01 Process Sensors)

a) Introduction to Pressure and Pressure Measurement
b) Pressure Elements
c) Gauge Calibration Basics
d) Gauge Calibration: Rotary Geared, Bellows, Bourdon Tube
e) Gauge Calibration: Absolute Pressure, Retard, Compound Gauges
f) Head Correction and Gauge Protection Devices

3. Level (IPSI01 Process Sensors)

a) Introduction to Liquid Level
b) Float Actuated and Magnetic Float Devices
c) Electrical, Sonic, and Radiation Level Measurement*
d) Pressure and Level Measurement Concepts
e) Differential Pressure
f) Temperature Compensation and Maintenance

* Radiation Level Measurement not used or taught at DCPP. The concepts and principles are taught in the Basic Sciences portion of the accredited training program.

4. Flow (IPSI01 Process Sensors)

a) Introduction to Fluid Flow
b) Differential Pressure Measurement
c) Flow Meters
d) Reset, Rate, and Combination Control*
e) Auctioneering, Ratio, and Cascade Control*

* The control functions are taught in the IPSI06 Process Control class at DCPP.

5. Force, Weight , and Motion (IPSI02 Pnuematic Instruments)

a) Introduction to Force, Weight, and Motion
b) Measuring Motion

6. Process Control (IPSI06 Process Control)

a) Introduction to Process Control Loops
b) Process Disturbances and Dynamics
c) Feedback and Feedforward Control
d) Two Position and Proportional Control

7. Digital Electronic Theory (ICBDL/ICADL Basic/Advanced Digital Logic) *

a) Binary Logic Circuits
b) Codes, Encoders, Decoders, and Flip Flops
c) Counters and Shift Registers
d) Data Transmission, Conversion, and Storage

* Only the ICBDL/ICADL courses will be offered at DCPP, no CBT

8. Electrical/Electronic Theory(IABSC/IABEC Semiconductors/Electronic Circuits)*

a) Semiconductors and Diodes
b) Rectifiers and Filters
c) Transistors, SCR's and Triacs

* Only the IABSC/IABEC courses will be offered at DCPP, no CBT

II. **Classroom Academics - Formal Courses**

A. Administered by Technical Learning Services: May be administered at DCPP using the lesson plan from Technical Learning Services.

1. Positioners (IPSI07 Control Valves and Actuators)

2. Power Electronics (IABSC/IABEC Semiconductors/Electronic)
(Circuits, Self Study Learning Center Lessons)
(EM0106 - EM0109)

3. Semiconductor/Electronic Circuits (IABSC/IABEC Semiconductors/Electronic)
(Circuits)

4. Generator/Relay Protection

III. On-The-Job Training (OJT)

A. Specific Task Training:

1. Each apprentice is required to complete a total of 1,126 hours of OJT. A minimum number of hours have been allotted to accomplish particular tasks across the various job responsibilities of the Control Technician. These hours are identified on the apprentice's OJT Monthly Progress Chart. An accounting of these hours will be maintained on each apprentice and documented on forms designed and provided to record their progress in the OJT program.

2. For each of the components/systems listed on the Apprentice Control Technician Daily Assignment Chart, the apprentice should become proficient in testing, calibrating, maintaining, and troubleshooting the various types of components/systems used at their facility.

IV. Progress

A. Monthly Assignment Chart: The apprentice will maintain a working copy of the Monthly Assignment Chart and provide the supervisor with updated hours completed in each responsibility area not less than once a month.

B. Progress Tracking: The supervisor will update the apprentice's progress on the Monthly Progress Chart and return the Daily Assignment Chart to the apprentice along with a copy of the updated Training Summaries.

C. Recording Hours Trained: The actual hours trained for each skill should be recorded in the box for the appropriate task on the Monthly Progress Chart.

Requirements for ACT with Instrument Repairman Background at Diablo Canyon Power Plant

I. Computer Based Training

NOTE: Credit for the following courses may be granted either on the successful completion of the computer based training (CBT) or at Diablo Canyon Power Plant (DCPP) credit for the classes listed in parenthesis. Some courses may only be available in one of the listed formats, either CBT or a DCPP class. See the note at the end of Section III for the names of the classes that go with the class numbers listed in parenthesis.

A. General Information:

1. Each topic (course) is divided into lessons.

2. The progression procedure through the computer based lessons are as follows:

a) The apprentice is allowed three attempts to pass each lesson.
b) An attempt is comprised of two "tries" to pass the lesson test.
c) The apprentice is given two hours to take the lesson and test for each try.
d) If the employee fails to pass the lesson test on the first attempt (first and second tries), the employee must wait thirty days before making a second attempt.
e) If the employee fails to pass the lesson test on the second attempt (third and fourth tries), the employee must wait another thirty days before making a third attempt.
f) If the apprentice fails to pass the lesson test on the third attempt (fifth and sixth tries), the apprentice's file will be referred to the Joint Apprenticeship Committee for review and decision.
g) The apprentice may take other lessons in their line of progression while in the thirty day waiting periods.

B. Course Information:

The CBT portion of the Apprentice Control Technician and Apprentice Electrical Control Technician training program is composed of twenty-five lessons, representing a total of sixty-six (66) hours. It is recommended, but not required that the lessons be taken in the order listed below.

1. Safety (TTB9501 Technical Maintenance all hands Electrical Safety Tailboard)

a) Electrical Safety

2. Electrical Print Reading (ME010104, ME010105, ME010106)
   a) Print Reading, Ladder Diagrams

3. Electrical/Electronic Test Instruments

   a) Megohmeter, Clamp-on Ammeter, and Wheatstone Bridge (These are incorporated within the courses on equipment that would require use this test equipment)
   b) Oscilloscope (IABTE Test Equipment)

4. Electrical Control Equipment

   a) Fuses and Molded Case Circuit Breakers (ME080101, ME080102, ME080103)
   b) Limit Switches
   c) Switches, Coils, and Overload Relays(ME130201, ME130202, ME130203, ME130204, ME130303)
   d) Motor Starters (ME130201, ME130202, ME130203, ME130204, ME130303)
   e) Troubleshooting Electrical Control Circuits (ME130201, ME130202, ME130203, ME130204, ME130303)

5. Electrical Switchgear

   a) Bus Work and Circuit Breakers (ME080301, ME080401)
   b) Circuit Breaker Testing and Maintenance (ME080301, ME080401)
   c)Protective Relays (ME090101, ME090102)

6. Electric Motors

   a) AC Motors: Theory and Routine Testing (ME110201, ME110202)
   b) AC Motors: Maintenance (ME110201, ME110202)
   c) AC Motors: Variable Speed Motor Theory and Maintenance (ME110201, ME110202)
   d) DC Motors: Theory and Maintenance (ME110101, ME110103)

7. Electrical/Electronic Theory(IABSC/IABEC Semiconductors/Electronic Circuits)*

   a) Three-Phase AC Systems (ME110201, ME110202)**
   b) Semiconductors and Diodes
   c) Rectifiers and Filters
   d) Transistors, SCRs, and Triacs
   e) Introduction to Digital Electronics

* Only the IABSC/IABEC courses will be offered at DCPP, no CBT option

** Not covered within IABSC/IABEC (ME110201 and ME110202 or CBT may be used for course credit)

8. Digital Electronic Theory (ICBDL/ICADL Basic/Advanced Digital Logic) *

a) Binary Logic Circuits
b) Codes, Encoders, Decoders, and Flip Flops
c) Counters and Shift Registers
d) Data Transmission, Conversion, and Storage

* Only the ICBDL/ICADL courses will be offered at DCPP, no CBT option

II. Classroom Academics - Formal Courses

A. Administered by Technical Learning Services: May be administered at DCPP using the lesson plan from Technical Learning Services.

1. Basic Relays (ME090101 Instrument Transformers) (ME090102 Introduction to Relays)
2. Power Electronics (IABSC/IABEC Semiconductors/Electronic) (Circuits, Self Study Learning Center Lessons) (EM0106 - EM0109)
3. Semiconductor/Electronic Circuits (IABSC/IABEC Semiconductors/Electronic) (Circuits)
4. Generator/Relay Protection

III. On-The-Job Training (OJT)

A. Written Correspondence Course:

1. The ACT Written Correspondence Course accounts for sixteen (16) hours of training. The course materials are provided by Technical Learning Services and contain the following lessons.

NOTE: Credit for the following courses may be granted either on the successful completion of the correspondence course or at DCPP credit for the classes listed in parenthesis. Some courses may only be available in one of the listed formats, either correspondence course or a DCPP class.

a) Reading Electrical Diagrams (ME010104, ME010105, ME010106)
b) High Voltage DC Resistance Testing
c) Station Batteries and DC Bus Protection

B. Specific Task Training:

1. Each apprentice is required to complete a total of 1,126 hours of OJT. A minimum number of hours have been allotted to accomplish particular tasks across the various job responsibilities of the Control Technician. These hours are identified on the apprentice's OJT Monthly Progress Chart. An accounting of these hours will be maintained on each apprentice and documented on forms designed and provided to record their progress in the OJT program.

2. For each of the components/systems listed on the Apprentice Control Technician Daily Assignment Chart, the apprentice should become proficient in testing, calibrating, maintaining, and troubleshooting the various types of components/systems used at their facility.

Names of DCPP Electrical Classes

ME010104 Logic Diagrams
ME010105 Single Line Diagrams
ME010106 480 Volt Schematics
ME080101 Protection Fundamentals
ME080102 Fuses and Their Replacement
ME080103 Circuit Breaker Basics
ME080301 Molded Case Circuit Breakers
ME080401 Plant Switchgear
ME090101 Instrument Transformers
ME090102 Introduction to Relays
ME110101 DC Machine Fundamentals
ME110103 DC Motors
ME110201 AC Machine Principles
ME110202 Three Phase AC Machines
ME130201 Basic Control Circuits
ME130202 Reduced Voltage Starting
ME130203 Multi-Speed AC Controllers
ME130204 Direct Current Controllers
ME130303 Jogging Controls

IV. **Progress**

A. Monthly Assignment Chart: The apprentice will maintain a working copy of the Monthly Assignment Chart and provide the supervisor with updated hours completed in each responsibility area not less than once a month.

B. Progress Tracking: The supervisor will update the apprentice's progress on the Monthly Progress Chart and return the Daily Assignment Chart to the apprentice along with a copy of the updated Training Summaries.

C. Recording Hours Trained: The actual hours trained for each skill should be recorded in the box for the appropriate task on the Monthly Progress Chart.

APPRENTICE CONTROL TECHNICIAN OJT PROGRESS SUMMARY SHEET FOR *First name Last name*	REQUIRED HOURS	ACCUMULATED HOURS	STATUS
INSTRUMENTATION & CONTROLS OJT (ELECTRICIAN)	256	0	*INCOMPLETE*
PRIMARY CONTROL ELEMENTS/PROCESS MEASURING	104	0	*INCOMPLETE*
CONTROLLERS (PNEUMATIC)	48	0	*INCOMPLETE*
FINAL CTRL ELEMENTS: POSITIONERS & ACTUATORS	48	0	*INCOMPLETE*
PLANT CONTROL SYSTEMS	56	0	*INCOMPLETE*
ELECTRONICS OJT (BOTH)	340	0	*INCOMPLETE*
TRANSDUCERS		0	
POWER SUPPLIES		0	
CONTROL SYSTEM MODULES		0	
PROCESS ANALYZERS		0	
TURBINE GENERATOR CONTROL		0	
PLANT SUPERVISORY& MONITORING SYSTEMS		0	
PLANT EQUIP PROTECTION & SAFETY SYSTEM		0	
COMPUTER SYSTEMS OJT (BOTH)	275	0	*INCOMPLETE*
COMPUTER MAIN FRAME		0	
INPUT/OUTPUT		0	
AUXILIARY MEMORY DEVICES		0	
ENGINEER'S/PROGRAMMER'S CONSOLE		0	
OPERATOR'S CONSOLE		0	
		LAST UPDATE ON:	Jul-20-1995

APPRENTICE CONTROL TECHNICIAN OJT PROGRESS SUMMARY SHEET FOR *First name Last name*	REQUIRED HOURS	ACCUMULATED HOURS	STATUS
PLANT SPECIFIC OJT (ELECTRICIAN)	135	0	INCOMPLETE
ELECTRONIC TRANSMITTERS		0	
INSTRUMENTATION TEST EQUIPMENT		0	
RECORDING INSTRUMENTATION		0	
WATER TREATMENT ANALYZERS		0	
DRYERS		0	
AIR QUALITY TESTERS (CONFINED SPACES)		0	
MERCURY HANDLING AND SAFETY		0	
PRINT READING		0	
PLANT SPECIFIC OJT (BOTH)	120	0	INCOMPLETE
BOILER & TURBINE SAFEGUARD SYSTEMS		0	
DISTRIBUTIVE CONTROL SYSTEMS		0	
COMBUSTION CONTROLS		0	
FLAME SCANNERS		0	
TURBINE SUPERVISORY INSTRUMENTATION		0	
PRINT READING		0	
VSD MOTOR CONTROLS		0	
REVERSE OSMOSIS SYSTEM		0	
GAS CHROMATOGRAPHY		0	
DEH AND TURBINE CONTROLS		0	
CONTROL LOOP TUNING		0	
SEQUENCE OF EVENTS LOGIC		0	
BURNER VIDEO MONITORING SYSTEM		0	
PROGRAMMABLE LOGIC CONTROLLERS (A.B.)		0	
CEMS		0	
		LAST UPDATE ON:	Jul-20-1995

ACT COURSE PROGRESS SUMMARY (ELECT. ACT)

First name Last name

COMPUTER BASED TRAINING	DATE ON 1st ATTEMPT	DATE ON 2nd ATTEMPT	DATE ON 3rd ATTEMPT	DATE COMPLETED
TEMPERATURE				
FILLED SYSTEMS AND BIMETALIC THERMOMETERS				
THERMOCOUPLES				
RTDs AND THERMISTERS				
PRESSURE				
INTRO TO PRESSURE AND PRESSURE MEASUREMENT				
PRESSURE ELEMENTS				
GAUGE CALIBRATION BASICS				
GAUGE CALIBRATION: ROTARY GEARED, BELLOWS, BOURDON TUBE				
GAUGE CALIBRATION: ABSOLUTE PRESSURE, RETARD, AND COMPOUND GAUGES				
HEAD CORRECTION & GAUGE PROTECTION DEVICES				
LEVEL				
INTRODUCTION TO FLUID LEVEL				
FLOAT ACTUATED AND MAGNETIC FLOAT DEVICES				
ELECTRICAL, SONIC, AND RADIATION LEVEL MEASUREMENT				
PRESSURE AND LEVEL MEASUREMENT CONCEPTS				
DIFFERENTIAL PRESSURE				
TEMPERATURE COMPENSATION AND MAINTENANCE				
FLOW				
INTRODUCTION TO FLUID FLOW				
DIFFERENTIAL PRESSURE MEASUREMENT				
FLOW METERS				
RESET, RATE, AND COMBINATION CONTROL				
AUCTIONEERING, RATIO, AND CASCADE CONTROL				
FORCE, WEIGHT, AND MOTION				
INTRODUCTION TO FORCE, WEIGHT, AND MOTION				
MEASURING MOTION				
PROCESS CONTROL				
INTRODUCTION TO PROCESS CONTROL LOOPS				
PROCESS DISTURBANCES AND DYNAMICS				
FEEDBACK AND FEEDFORWARD CONTROL				
TWO POSITION AND PROPORTIONAL CONTROL				
DIGITAL ELECTRONIC THEORY				
BINARY LOGIC CIRCUITS				
CODES, ENCODERS, DECODERS, AND FLIP FLOPS				
COUNTERS AND SHIFT REGISTERS				
DATA TRANSMISSION, CONVERSION, AND STORAGE				
ELECTRICAL/ELECTRONICS THEORY				
SEMICONDUCTORS AND DIODES				
RECTIFIERS AND FILTERS				
TRANSISTORS, SCRs AND TRIACs				

CLASSROOM ACADEMICS – FORMAL COURSES	DATE ON 1st ATTEMPT	DATE ON 2nd ATTEMPT	DATE ON 3rd ATTEMPT	DATE COMPLETED
POSITIONERS, 1 WEEK				
POWER ELECTRONICS, 1 WEEK				
SEMICONDUCTOR/ELECTRONIC CIRCUITS, 2 WEEKS				
GENERATOR/RELAY PROTECTION, 3 DAYS				
		LAST UPDATE ON:		Jul-20-1995

	APPRENTICE CONTROL TECHNICIAN OJT MONTHLY PROGRESS CHART														
	First name Last name														
A-CTEOJ001	INSTRUMENTATION & CONTROLS OJT (ELECTRICIAN)														
	TOTAL HOURS REQUIRED	256													
	TOTAL HOURS ACCUMULATED (1st 12 MONTHS)	0	1st 12 MONTHS												12 MONTH
			1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
A-CTET01	PRIMARY CONTROL ELEMENTS/PROCESS MEASURING	104													
A-CTES01	WATER FLOW														0
A-CTES02	STEAM FLOW														0
A-CTES03	AIR FLOW														0
A-CTES04	FUEL FLOW														0
A-CTES06	LEVEL														0
A-CTES07	GAUGES														0
A-CTES08	O_2 ANALYZERS														0
A-CTES10	TEMPERATURE														0
A-CTES11	DIFFERENTIAL PRESSURE														0
A-CTET02	CONTROLLERS (PNEUMATIC)	48													
A-CTES12	RELAYS														0
A-CTES13	STANDATROLS														0
A-CTES14	INTEGRATORS														0
A-CTES15	COMPENSATORS														0
A-CTES16	HAND/AUTO STATIONS														0
A-CTES17	TRANSMITTERS														0
A-CTES18	RECEIVERS														0
A-CTET03	FINAL CONTROL ELEMENTS: POSITIONERS AND ACTUATORS	48													
A-CTES19	CONTROL DRIVES														0
A-CTES20	CONTROL VALVES														0
A-CTET04	PLANT CONTROL SYSTEMS	56													
A-CTES24	CHLORINATOR SYSTEM														0
A-CTES25	SOOTBLOWER SYSTEM														0
A-CTES26	HYDRAZINE SYSTEM														0
A-CTES27	SEAL OIL SYSTEM														0
A-CTES28	TURBINE CONTROLS														0
A-CTES29	COMBUSTION CONTROLS														0
A-CTES30	TEMPERATURE CONTROLS														0
A-CTES31	THREE ELEMENT FEEDWATER CONTROLS														0
										LAST UPDATE ON:					Jul-20-95

A-CTBOJ001	ELECTRONICS O.J.T (BOTH)														
	TOTAL HOURS REQUIRED	340													
	TOTAL HOURS ACCUMULATED (1st 12 MONTHS)	0	1st 12 MONTHS												12 MONTH
			1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
A-CTBT01	TRANSDUCERS														
A-CTBS01	ELECTRONIC COMPONENTS: TRANSDUCERS														0
A-CTBT02	POWER SUPPLIES														
A-CTBS02	ELECTRONIC COMPONENTS: POWER SUPPLIES														0
A-CTBT03	CONTROL SYSTEM MODULES														
A-CTBS03	ELECTRONIC COMPONENTS: CONTROL SYSTEM MODULES														0
A-CTBT04	PROCESS ANALYZERS														
A-CTBS04	ELECTRONIC COMPONENTS: PROCESS ANALYZERS														0
A-CTBT05	TURBINE GENERATOR CONTROL														
A-CTBS05	ELECTRONIC COMPONENTS: TURBINE GENERATOR CONTROL														0
A-CTBT06	PLANT SUPERVISORY & MONITORING SYSTEMS														
A-CTBS06	ELECTRONIC SYSTEMS: PLANT SUPERVISORY & MONITORING SYSTEMS														0
A-CTBT07	PLANT EQUIP PROTECTION & SAFETY SYSTEMS														
A-CTBS07	ELECTRONIC SYSTEMS: PLANT EQUIPMENT PROTECTION & SAFETY SYSTEMS														0
										LAST UPDATE ON:					Jul-20-95

A-CTBOJ002	COMPUTER SYSTEMS OJT (BOTH)														
	TOTAL HOURS REQUIRED	275													
	TOTAL HOURS ACCUMULATED (1st 12 MONTHS)	0	1st 12 MONTHS												12 MONTH
			1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
A-CTBT08	COMPUTER MAIN FRAME														
A-CTBS10	CPU														0
A-CTBS11	DMA														0
A-CTBS12	FLOATING POINT														0
A-CTBT09	INPUT/OUTPUT														
A-CTBS13	TIMING AND MULTIPLEX														0
A-CTBS14	ANALOG INPUT														0
A-CTBS15	ANALOG OUTPUT														0
A-CTBS16	INTERRUPTS														0
A-CTBS17	CONTACT INPUT														0
A-CTBS18	CONTACT OUTPUT														0
A-CTBT10	AUXILIARY MEMORY DEVICES														
A-CTBS19	HIGH SPEED MEMORY														0
A-CTBS20	HARD DISK														0
A-CTBS21	FLOPPY DISK														0
A-CTBS22	STATIC BULK														0
A-CTBT11	ENGINEER'S/PROGRAMMER'S CONSOLE														
A-CTBS23	PAPER TAPE READER														0
A-CTBS24	PAPER TAPE PUNCH														0
A-CTBS25	PRINTER														0
A-CTBT12	OPERATOR'S CONSOLE														
A-CTBS26	VISUAL DISPLAYS/CRTs														0
A-CTBS27	MANUAL/AUTO STATIONS														0
A-CTBS28	PANEL PUSHBUTTONS														0
											LAST UPDATE ON:				Jul-20-95

	PLANT SPECIFIC OJT (ELECTRICIAN)														
	TOTAL HOURS REQUIRED	135													
	TOTAL HOURS ACCUMULATED (1st 12 MONTHS)	0	1st 12 MONTHS												12 MONTH
			1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	ELECTRONIC TRANSMITTERS:														
	(SMART)														0
	(NON-SMART)														0
	INSTRUMENTATION TEST EQUIPMENT														
	DEAD-WEIGHT TESTERS														0
	CALIBRATOR (RONAN/TRANSMISSION)														0
	DECADE BOX														0
	COMMUNICATORS														0
	RECORDING INSTRUMENTATION														0
	WATER TREATMENT ANALYZERS:														
	pH														0
	SILICA														0
	CONDUCTIVITY														0
	PHOSPHATE														0
	DRYERS:														
	INSTRUMENT AIR														0
	HYDROGEN DRYERS														0
	SAFETY FEATURES														0
	AIR QUALITY TESTERS (CONFINED SPACES)														0
	MERCURY HANDLING AND SAFETY														0
	PRINT READING:														
	P&IDs														0
	PRINT CORRECTIONS														0
											LAST UPDATE ON:				Jul-20-95

	PLANT SPECIFIC OJT (BOTH)														
	TOTAL HOURS REQUIRED	120													
	TOTAL HOURS ACCUMULATED (1st 12 MONTHS)	0	1st 12 MONTHS												12 MONTH
			1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	BOILER & TURBINE SAFEGUARD SYSTEMS														
	COLD AIR TEST														0
	TURBINE TRIP TEST														0
	OPERATIONAL TRIP TEST														0
	DISTRIBUTIVE CONTROL SYSTEMS														
	GENERAL TRAINING (BAILEY)														0
	PCU														0
	CAD														0
	TEXT														0
	COMBUSTION CONTROLS														
	PNEUMATIC (ENHANCEMENT)														0
	PLANT SPECIFIC														0
	FLAME SCANNERS														0
	TURBINE SUPERVISORY INSTRUMENTATION														
	MONITORS AND SYSTEMS														0
	VIDEO TAPE														0
	ANALYZING DATA														0
	PREDICTIVE MAINTENANCE VIBRATION DATA COLLECTION														0
	PRINT READING:														
	DCS LOGIC														0
	CONTROL PRINTS/COMBUSTION CONTROLS														0
	VSD MOTOR CONTROLS														0
	REVERSE OSMOSIS SYSTEM														0
	GAS CHROMATOGRAPHY														0
	DEH AND TURBINE CONTROLS														0
	CONTROL LOOP TUNING														0
	SEQUENCE OF EVENTS LOGIC														0
	BURNER VIDEO MONITORING SYSTEM														0
	PROGRAMMABLE LOGIC CONTROLLERS (A.B.)														0
	CEMS														0
										LAST UPDATE ON:					Jul-20-95

	APPRENTICE CONTROL TECHNICIAN OJT MONTHLY PROGRESS CHART First name Last name														
A-CTEOJ001	INSTRUMENTATION & CONTROLS OJT (ELECTRICIAN)														
	TOTAL HOURS REQUIRED	256													
	TOTAL HOURS ACCUMULATED (24 MONTHS)	0	2nd 12 MONTHS												24 MONTH
			13	14	15	16	17	18	19	20	21	22	23	24	TOTALS
A-CTET01	PRIMARY CONTROL ELEMENTS/PROCESS MEASURING	104													
A-CTES01	WATER FLOW														0
A-CTES02	STEAM FLOW														0
A-CTES03	AIR FLOW														0
A-CTES04	FUEL FLOW														0
A-CTES06	LEVEL														0
A-CTES07	GAUGES														0
A-CTES08	O_2 ANALYZERS														0
A-CTES10	TEMPERATURE														0
A-CTES11	DIFFERENTIAL PRESSURE														0
A-CTET02	CONTROLLERS (PNEUMATIC)	48													
A-CTES12	RELAYS														0
A-CTES13	STANDATROLS														0
A-CTES14	INTEGRATORS														0
A-CTES15	COMPENSATORS														0
A-CTES16	HAND/AUTO STATIONS														0
A-CTES17	TRANSMITTERS														0
A-CTES18	RECEIVERS														0
A-CTET03	FINAL CONTROL ELEMENTS: POSITIONERS & ACTUATORS	48													
A-CTES19	CONTROL DRIVES														0
A-CTES20	CONTROL VALVES														0
A-CTET04	PLANT CONTROL SYSTEMS	56													
A-CTES24	CHLORINATOR SYSTEM														0
A-CTES25	SOOTBLOWER SYSTEM														0
A-CTES26	HYDRAZINE SYSTEM														0
A-CTES27	SEAL OIL SYSTEM														0
A-CTES28	TURBINE CONTROLS														0
A-CTES29	COMBUSTION CONTROLS														0
A-CTES30	TEMPERATURE CONTROLS														0
A-CTES31	THREE ELEMENT FEEDWATER CONTROLS														0
											LAST UPDATE ON:				Jul-20-95

A-CTBOJ001	ELECTRONICS O.I.T. (BOTH)															
	TOTAL HOURS REQUIRED	340														
	TOTAL HOURS ACCUMULATED (24 MONTHS)	0	2nd 12 MONTHS													24 MONTH
			13	14	15	16	17	18	19	20	21	22	23	24	TOTALS	
A-CTBT01	TRANSDUCERS															
A-CTBS01	ELECTRONIC COMPONENTS: TRANSDUCERS														0	
A-CTBT02	POWER SUPPLIES															
A-CTBS02	ELECTRONIC COMPONENTS: POWER SUPPLIES														0	
A-CTBT03	CONTROL SYSTEM MODULES															
A-CTBS03	ELECTRONIC COMPONENTS: CONTROL SYSTEM MODULES														0	
A-CTBT04	PROCESS ANALYZERS															
A-CTBS04	ELECTRONIC COMPONENTS: PROCESS ANALYZERS														0	
A-CTBT05	TURBINE GENERATOR CONTROL															
A-CTBS05	ELECTRONIC COMPONENTS: TURBINE GENERATOR CONTROL														0	
A-CTBT06	PLANT SUPERVISORY & MONITORING SYSTEMS															
A-CTBS06	ELECTRONIC SYSTEMS: PLANT SUPERVISORY & MONITORING SYSTEMS														0	
A-CTBT07	PLANT EQUIP PROTECTION & SAFETY SYSTEMS															
A-CTBS07	ELECTRONIC SYSTEMS: PLANT EQUIPMENT PROTECTION & SAFETY SYSTEMS														0	
										LAST UPDATE ON:					Jul-20-95	

A-CTBOJ002	COMPUTER SYSTEMS OJT (BOTH)															
	TOTAL HOURS REQUIRED	275														
	TOTAL HOURS ACCUMULATED (24 MONTHS)	0	2nd 12 MONTHS													24 MONTH
			13	14	15	16	17	18	19	20	21	22	23	24	TOTALS	
A-CTBT08	COMPUTER MAIN FRAME															
A-CTBS10	CPU														0	
A-CTBS11	DMA														0	
A-CTBS12	FLOATING POINT														0	
A-CTBT09	INPUT/OUTPUT															
A-CTBS13	TIMING AND MULTIPLEX														0	
A-CTBS14	ANALOG INPUT														0	
A-CTBS15	ANALOG OUTPUT														0	
A-CTBS16	INTERRUPTS														0	
A-CTBS17	CONTACT INPUT														0	
A-CTBS18	CONTACT OUTPUT														0	
A-CTBT10	AUXILIARY MEMORY DEVICES															
A-CTBS19	HIGH SPEED MEMORY														0	
A-CTBS20	HARD DISK														0	
A-CTBS21	FLOPPY DISK														0	
A-CTBS22	STATIC BULK														0	
A-CTBT11	ENGINEER'S/PROGRAMMER'S CONSOLE															
A-CTBS23	PAPER TAPE READER														0	
A-CTBS24	PAPER TAPE PUNCH														0	
A-CTBS25	PRINTER														0	
A-CTBT12	OPERATOR'S CONSOLE															
A-CTBS26	VISUAL DISPLAYS/CRTs														0	
A-CTBS27	MANUAL/AUTO STATIONS														0	
A-CTBS28	PANEL PUSHBUTTONS														0	
											LAST UPDATE ON:				Jul-20-96	

	PLANT SPECIFIC O.J.T. (ELECTRICIAN)														
	TOTAL HOURS REQUIRED	135													
	TOTAL HOURS ACCUMULATED (24 MONTHS)	0	2nd 12 MONTHS												24 MONTH
			13	14	15	16	17	18	19	20	21	22	23	24	TOTALS
	ELECTRONIC TRANSMITTERS:														
	(SMART)														0
	(NON-SMART)														0
	INSTRUMENTATION TEST EQUIPMENT														
	DEAD-WEIGHT TESTERS														0
	CALIBRATOR (RONAN/TRANSMISSION)														0
	DECADE BOX														0
	COMMUNICATORS														0
	RECORDING INSTRUMENTATION														0
	WATER TREATMENT ANALYZERS:														
	pH														0
	SILICA														0
	CONDUCTIVITY														0
	PHOSPHATE														0
	DRYERS:														
	INSTRUMENT AIR														0
	HYDROGEN DRYERS														0
	SAFETY FEATURES														0
	AIR QUALITY TESTERS (CONFINED SPACES)														0
	MERCURY HANDLING AND SAFETY														0
	PRINT READING:														
	P&IDs														0
	PRINT CORRECTIONS														0
											LAST UPDATE ON:				Jul-20-95

	PLANT SPECIFIC O.T. (BOTH)														
	TOTAL HOURS REQUIRED	120													
	TOTAL HOURS ACCUMULATED (24 MONTHS)	0	2nd 12 MONTHS												24 MONTH
			13	14	15	16	17	18	19	20	21	22	23	24	TOTALS
	BOILER & TURBINE SAFEGUARD SYSTEMS														
	COLD AIR TEST														0
	TURBINE TRIP TEST														0
	OPERATIONAL TRIP TEST														0
	DISTRIBUTIVE CONTROL SYSTEMS														
	GENERAL TRAINING (BAILEY)														0
	PCU														0
	CAD														0
	TEXT														0
	COMBUSTION CONTROLS														
	PNEUMATIC (ENHANCEMENT)														0
	PLANT SPECIFIC														0
	FLAME SCANNERS														0
	TURBINE SUPERVISORY INSTRUMENTATION														
	MONITORS AND SYSTEMS														0
	VIDEO TAPE														0
	ANALYZING DATA														0
	PREDICTIVE MAINTENANCE VIBRATION DATA COLLECTION														0
	PRINT READING:														
	DCS LOGIC														0
	CONTROL PRINTS/COMBUSTION CONTROLS														0
	VSD MOTOR CONTROLS														0
	REVERSE OSMOSIS SYSTEM														0
	GAS CHROMATOGRAPHY														0
	DEH AND TURBINE CONTROLS														0
	CONTROL LOOP TUNING														0
	SEQUENCE OF EVENTS LOGIC														0
	BURNER VIDEO MONITORING SYSTEM														0
	PROGRAMMABLE LOGIC CONTROLLERS (A.B.)														0
	CEMS														0
										LAST UPDATE ON:					Jul-20-95

APPRENTICE CONTROL TECHNICIAN OJT PROGRESS SUMMARY SHEET FOR *First name Last name*	REQUIRED HOURS	ACCUMULATED HOURS	STATUS
ELECTRICAL OJT (INSTRUMENT REPAIRMAN)	248	0	*INCOMPLETE*
ELECTRICAL DIAGRAMS INTERPRETATION	24	0	*INCOMPLETE*
METERS	32	0	*INCOMPLETE*
MOTOR TESTING	16	0	*INCOMPLETE*
CIRCUIT BREAKERS	24	0	*INCOMPLETE*
TRANSFORMER AND BUS PROTECTION	24	0	*INCOMPLETE*
BATTERY CHARGERS AND INVERTERS	16	0	*INCOMPLETE*
GROUND DETECTION	16	0	*INCOMPLETE*
ANNUNCIATOR SYSTEMS	24	0	*INCOMPLETE*
GENERATOR PRINCIPLES AND PROTECTION	32	0	*INCOMPLETE*
VOLTAGE REGULATION AND EXCITATION	40	0	*INCOMPLETE*
ELECTRONICS OJT (BOTH)	340	0	*INCOMPLETE*
TRANSDUCERS		0	
POWER SUPPLIES		0	
CONTROL SYSTEM MODULES		0	
PROCESS ANALYZERS		0	
TURBINE GENERATOR CONTROL		0	
PLANT SUPERVISORY& MONITORING SYSTEMS		0	
PLANT EQUIP PROTECTION & SAFETY SYSTEM		0	
COMPUTER SYSTEMS OJT (BOTH)	275	0	*INCOMPLETE*
COMPUTER MAIN FRAME		0	
INPUT/OUTPUT		0	
AUXILIARY MEMORY DEVICES		0	
ENGINEER'S/PROGRAMMER'S CONSOLE		0	
OPERATOR'S CONSOLE		0	
	LAST UPDATE ON:		Jul-20-1995

APPRENTICE CONTROL TECHNICIAN OJT PROGRESS SUMMARY SHEET FOR *First name Last name*	REQUIRED HOURS	ACCUMULATED HOURS	STATUS
PLANT SPECIFIC OJT (INSTRUMENT REPAIRMAN)	143	0	*INCOMPLETE*
CONTROL CIRCUIT TROUBLESHOOTING		0	
ELECTRICAL SCHEMATICS/PRINT CORRECTIONS		0	
GENERATOR BRUSH MAINTENANCE		0	
BATTERY MAINTENANCE TRAINING		0	
HIGH VOLTAGE		0	
ELECTRICAL TEST EQUIPMENT		0	
TROUBLESHOOTING GROUNDS		0	
MOTOR MAINTENANCE TESTING		0	
MOTOR MAINTENANCE OVERHAUL		0	
WIRE/UNWIRE MOTORS		0	
BREAKERS		0	
MOTOR OPERATED VALVES		0	
TRANSFORMERS 18 KV TO 480 VOLT		0	
CRANES AND ELEVATORS		0	
CONDUIT AND WIRE PULLS		0	
PCBs		0	
PLANT SPECIFIC OJT (BOTH)	120	0	*INCOMPLETE*
BOILER & TURBINE SAFEGUARD SYSTEMS		0	
DISTRIBUTIVE CONTROL SYSTEMS		0	
COMBUSTION CONTROLS		0	
FLAME SCANNERS		0	
TURBINE SUPERVISORY INSTRUMENTATION		0	
PRINT READING		0	
VSD MOTOR CONTROLS		0	
REVERSE OSMOSIS SYSTEM		0	
GAS CHROMATOGRAPHY		0	
DEH AND TURBINE CONTROLS		0	
CONTROL LOOP TUNING		0	
SEQUENCE OF EVENTS LOGIC		0	
BURNER VIDEO MONITORING SYSTEM		0	
PROGRAMMABLE LOGIC CONTROLLERS (A.B.)		0	
CEMS		0	
		LAST UPDATE ON:	Jul-20-1995

ACT COURSE PROGRESS SUMMARY (I.R. ACT)

First name Last name

COMPUTER BASED TRAINING	DATE ON 1st ATTEMPT	DATE ON 2nd ATTEMPT	DATE ON 3rd ATTEMPT	DATE COMPLETED
SAFETY				
ELECTRICAL SAFETY				
ELECTRICAL PRINT READING				
PRINT READING, LADDER DIAGRAMS				
ELECTRICAL/ELECTRONIC TEST INSTRUMENTS				
MEG OHMETER, CLAMP-ON AMMETER, AND WHEATSTONE BRIDGE				
OSCILLOSCOPE				
ELECTRICAL CONTROL EQUIPMENT				
FUSES AND MOLDED CASE CIRCUIT BREAKERS				
LIMIT SWITCHES				
SWITCHES, COILS, AND OVERLOAD RELAYS				
MOTOR STARTERS				
TROUBLESHOOTING ELECTRICAL CONTROL CIRCUITS				
ELECTRICAL SWITCHGEAR				
BUS WORK AND CIRCUIT BREAKERS				
CIRCUIT BREAKER TESTING AND MAINTENANCE				
PROTECTIVE RELAYS				
ELECTRICAL MOTORS				
AC MOTORS: THEORY AND ROUTINE TESTING				
AC MOTORS: MAINTENANCE				
AC MOTORS: VARIABLE SPEED MOTOR THEORY AND MAINTENANCE				
DC MOTORS: THEORY AND MAINTENANCE				
ELECTRICAL/ELECTRONIC THEORY				
THREE PHASE AC SYSTEMS				
SEMICONDUCTORS AND DIODES				
RECTIFIERS AND FILTERS				
TRANSISTORS, SCRs, AND TRIACs				
INTRODUCTION TO DIGITAL ELECTRONICS				
DIGITAL ELECTRONIC THEORY				
BINARY LOGIC CIRCUITS				
CODES, ENCODERS, DECODERS, AND FLIP FLOPS				
COUNTERS AND SHIFT REGISTERS				
DATA TRANSMISSION, CONVERSION, AND STORAGE				

CLASSROOM ACADEMICS – FORMAL COURSES	DATE ON 1st ATTEMPT	DATE ON 2nd ATTEMPT	DATE ON 3rd ATTEMPT	DATE COMPLETED
BASIC RELAYS, 1 WEEK				
POWER ELECTRONICS, 1 WEEK				
SEMICONDUCTOR/ELECTRONIC CIRCUITS, 2 WEEKS				
GENERATOR/RELAY PROTECTION, 3 DAYS				

ON THE JOB TRAINING – WRITTEN CORRESPONDENCE LESSONS	DATE COMPLETED
READING ELECTRICAL DIAGRAMS	
HIGH VOLTAGE DC RESISTANCE TESTING	
STATION BATTERIES AND DC BUS PROTECTION	

LAST UPDATE ON: Jul-20-1995

	APPRENTICE CONTROL TECHNICIAN OJT MONTHLY PROGRESS CHART First name Last name														
A-CTIOJ001	ELECTRICAL OJT (INSTRUMENT REPAIRMAN)														
	TOTAL HOURS REQUIRED	248													
	TOTAL HOURS ACCUMULATED (1st 12 MONTHS)	0	1st 12 MONTHS												12 MONTH
			1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
A-CTIT01	ELECTRICAL DIAGRAMS INTERPRETATION	24													
A-CTIS01	PRINT READING														0
A-CTIT02	METERS	32													
A-CTIS02	INDICATING AND RECORDING METERS														0
A-CTIS03	VOLTMETERS														0
A-CTIS04	VOLTMETER RECORDING														0
A-CTIS05	AMMETERS														0
A-CTIS06	WATTMETERS														0
A-CTIS07	WATTMETER RECORDING														0
A-CTIS08	WATTHOUR METERS														0
A-CTIS09	VARMETERS														0
A-CTIS10	VARMETER RECORDING														0
A-CTIS11	FREQUENCY METER														0
A-CTIS12	FREQUENCY METER RECORDING														0
A-CTIS13	POWER FACTOR METER														0
A-CTIS14	SYNCHROSCOPE														0
A-CTIT03	MOTOR TESTING	16													
A-CTIS15	MOTOR TESTING														0
A-CTIT04	CIRCUIT BREAKERS	24													
A-CTIS16	MAIN CIRCUIT BREAKER & CONTROL SCHEME														0
A-CTIS17	CIRCUIT BREAKER OPERATION & CONTROL SCHEME														0
A-CTIT05	TRANSFORMER AND BUS PROTECTION	24													
A-CTIS18	POTENTIAL DEVICES AND TRANSFORMERS														0
A-CTIS19	4160 & 2400 VOLT CONTROL & TRANSFER SCHEMES														0
A-CTIS20	480 VOLT CONTROL AND TRANSFER SCHEMES														0
A-CTIS21	AUTO TRANSFER OF LIGHTING CIRCUITS FROM AC TO DC														0
A-CTIS22	INSTRUMENT AC TRANSFER SCHEMES														0
A-CTIS23	TRANSFORMER PROTECTION AND IT'S FUNCTION														0
A-CTIS24	BUS PROTECTION AND IT'S FUNCTION														0
A-CTIS25	EQUIPMENT RELAY PROTECTION AND IT'S FUNCTION														0
												LAST UPDATE ON:			Jul-20-95

			1st 12 MONTHS												12 MONTH
	ELECTRICAL O.I.T.		1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
A-CTIT06	BATTERY CHARGERS AND INVERTERS	16													
A-CTIS26	INVERTERS ROTARY AND/OR SOLID STATE														0
A-CTIS27	BATTERY CHARGERS ROTARY AND/OR SOLID STATE														0
A-CTIT07	GROUND DETECTION	16													
A-CTIS28	GROUND DETECTION														0
A-CTIT08	ANNUNCIATOR SYSTEMS	24													
A-CTIS29	ANNUNCIATOR SYSTEMS														0
A-CTIT10	GENERATOR PRINCIPLES AND PROTECTION	32													
A-CTIS36	CONSTRUCTION OF GENERATORS														0
A-CTIS37	GENERATOR TESTING														0
A-CTIS38	SYNCHRONIZING (MANUAL OR AUTO)														0
A-CTIT11	VOLTAGE REGULATION AND EXCITATION	40													
A-CTIS39	VARIOUS TYPES OF EXCITERS (CONVENTIONAL)														0
A-CTIS40	VARIOUS TYPES OF VOLTAGE REGULATORS														0
A-CTIS41	RHEOSTATS														0
A-CTIS42	BASE/VOLTAGE ADJUSTERS														0
A-CTIS43	AMPLIDYNE EXCITERS														0
A-CTIS44	BRUSHLESS EXCITATION														0
A-CTIS45	MAGNETIC AMPLIFIERS														0
A-CTIS46	FIELD DISCHARGE RESISTORS														0
												LAST UPDATE ON:			Jul-20-98

A-CTBOJ001	ELECTRONICS O/T (BOTH)															
	TOTAL HOURS REQUIRED	340														
	TOTAL HOURS ACCUMULATED (1st 12 MONTHS)	0	1st 12 MONTHS													12 MONTH
			1	2	3	4	5	6	7	8	9	10	11	12		TOTALS
A-CTBT01	TRANSDUCERS															
A-CTBS01	ELECTRONIC COMPONENTS: TRANSDUCERS															0
A-CTBT02	POWER SUPPLIES															
A-CTBS02	ELECTRONIC COMPONENTS: POWER SUPPLIES															0
A-CTBT03	CONTROL SYSTEM MODULES															
A-CTBS03	ELECTRONIC COMPONENTS: CONTROL SYSTEM MODULES															0
A-CTBT04	PROCESS ANALYZERS															
A-CTBS04	ELECTRONIC COMPONENTS: PROCESS ANALYZERS															0
A-CTBT05	TURBINE GENERATOR CONTROL															
A-CTBS05	ELECTRONIC COMPONENTS: TURBINE GENERATOR CONTROL															0
A-CTBT06	PLANT SUPERVISORY& MONITORING SYSTEMS															
A-CTBS06	ELECTRONIC SYSTEMS: PLANT SUPERVISORY & MONITORING SYSTEMS															0
A-CTBT07	PLANT EQUIP PROTECTION & SAFETY SYSTEM															
A-CTBS07	ELECTRONIC SYSTEMS: PLANT EQUIPMENT PROTECTION & SAFETY SYSTEMS															0
											LAST UPDATE ON:				Jul-20-96	

A-CTBOJ002	COMPUTER SYSTEMS O/T (BOTH)														
	TOTAL HOURS REQUIRED	275													
	TOTAL HOURS ACCUMULATED (1st 12 MONTHS)	0	1st 12 MONTHS												12 MONTH
			1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
A-CTBT08	COMPUTER MAIN FRAME														
A-CTBS10	CPU														0
A-CTBS11	DMA														0
A-CTBS12	FLOATING POINT														0
A-CTBT09	INPUT/OUTPUT														
A-CTBS13	TIMING AND MULTIPLEX														0
A-CTBS14	ANALOG INPUT														0
A-CTBS15	ANALOG OUTPUT														0
A-CTBS16	INTERRUPTS														0
A-CTBS17	CONTACT INPUT														0
A-CTBS18	CONTACT OUTPUT														0
A-CTBT10	AUXILIARY MEMORY DEVICES														
A-CTBS19	HIGH SPEED MEMORY														0
A-CTBS20	HARD DISK														0
A-CTBS21	FLOPPY DISK														0
A-CTBS22	STATIC BULK														0
A-CTBT11	ENGINEER'S/PROGRAMMER'S CONSOLE														
A-CTBS23	PAPER TAPE READER														0
A-CTBS24	PAPER TAPE PUNCH														0
A-CTBS25	PRINTER														0
A-CTBT12	OPERATOR'S CONSOLE														
A-CTBS26	VISUAL DISPLAYS/CRTs														0
A-CTBS27	MANUAL/AUTO STATIONS														0
A-CTBS28	PANEL PUSHBUTTONS														0
											LAST UPDATE ON:				Jul-20-95

	PLANT SPECIFIC CUT (INSTRUMENT REPAIRMAN)														
	TOTAL HOURS REQUIRED	143													
	TOTAL HOURS ACCUMULATED (1st 12 MONTHS)	0	1st 12 MONTHS												12 MONTH
			1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	CONTROL CIRCUIT TROUBLESHOOTING														0
	ELECTRICAL SCHEMATICS/PRINT CORRECTIONS														0
	GENERATOR BRUSH MAINTENANCE														0
	BATTERY MAINTENANCE TRAINING														0
	HIGH VOLTAGE:														
	SAFETY														0
	GROUNDING														0
	TESTING														0
	WORK														0
	ELECTRICAL TEST EQUIPMENT:														
	EPOCH														0
	HI-POT														0
	MEGGER														0
	AMMETERS														0
	BREAKER TEST SET														0
	KELVIN BRIDGE														0
	MICRO-OHMMETER														0
	HOT STICK														0
	TROUBLESHOOTING GROUNDS:														
	DC														0
	480 VOLT														0
	4160 VOLT														0
	MOTOR MAINTENANCE TESTING:														
	MEGGERING														0
	HI-POT														0
	GROWLER														0
	SURGE CAPARISON														0
	MOTOR MAINTENANCE OVERHAUL:														
	DISASSEMBLY														0
	CLEAN & INSPECTION														0
	BEARING & OIL														0
	REASSEMBLY														0
	WIRE/UNWIRE MOTORS:														
	TAPING CAUTIONS														0
	ROTATION CHECK														0
	BREAKERS														0
	MOTOR OPERATED VALVES														0
	TRANSFORMERS 18 KV TO 480 VOLT														0
	CRANES AND ELEVATORS														0
	CONDUIT AND WIRE PULLS														0
	PCBs														0
											LAST UPDATE ON:				Jul-20-95

	PLANT SPECIFIC OJT (BOTH)														
	TOTAL HOURS REQUIRED	120													
	TOTAL HOURS ACCUMULATED (1st 12 MONTHS)	0	1st 12 MONTHS												12 MONTH
			1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	BOILER & TURBINE SAFEGUARD SYSTEMS														
	COLD AIR TEST														0
	TURBINE TRIP TEST														0
	OPERATIONAL TRIP TEST														0
	DISTRIBUTIVE CONTROL SYSTEMS														
	GENERAL TRAINING (BAILEY)														0
	PCU														0
	CAD														0
	TEXT														0
	COMBUSTION CONTROLS														
	PNEUMATIC (ENHANCEMENT)														0
	PLANT SPECIFIC														0
	FLAME SCANNERS														0
	TURBINE SUPERVISORY INSTRUMENTATION														
	MONITORS AND SYSTEMS														0
	VIDEO TAPE														0
	ANALYZING DATA														0
	PREDICTIVE MAINTENANCE VIBRATION DATA COLLECTION														0
	PRINT READING:														
	DCS LOGIC														0
	CONTROL PRINTS/COMBUSTION CONTROLS														0
	VSD MOTOR CONTROLS														0
	REVERSE OSMOSIS SYSTEM														0
	GAS CHROMATOGRAPHY														0
	DEH AND TURBINE CONTROLS														0
	CONTROL LOOP TUNING														0
	SEQUENCE OF EVENTS LOGIC														0
	BURNER VIDEO MONITORING SYSTEM														0
	PROGRAMMABLE LOGIC CONTROLLERS (A.B.)														0
	CEMS														0
											LAST UPDATE ON:				Jul-20-95

	APPRENTICE CONTROL TECHNICIAN OJT MONTHLY PROGRESS CHART First name Last name														
A-CTIOJ001	ELECTRICAL OJT (INSTRUMENT REPAIRMAN)														
	TOTAL HOURS REQUIRED	248													
	TOTAL HOURS ACCUMULATED (24 MONTHS)	0	2nd 12 MONTHS												24 MONTH
			13	14	15	16	17	18	19	20	21	22	23	24	TOTALS
A-CTIT01	ELECTRICAL DIAGRAMS INTERPRETATION	24													
A-CTIS01	PRINT READING														0
A-CTIT02	METERS	32													
A-CTIS02	INDICATING AND RECORDING METERS														0
A-CTIS03	VOLTMETERS														0
A-CTIS04	VOLTMETER RECORDING														0
A-CTIS05	AMMETERS														0
A-CTIS06	WATTMETERS														0
A-CTIS07	WATTMETER RECORDING														0
A-CTIS08	WATTHOUR METERS														0
A-CTIS09	VARMETERS														0
A-CTIS10	VARMETER RECORDING														0
A-CTIS11	FREQUENCY METER														0
A-CTIS12	FREQUENCY METER RECORDING														0
A-CTIS13	POWER FACTOR METER														0
A-CTIS14	SYNCHROSCOPE														0
A-CTIT03	MOTOR TESTING	16													
A-CTIS15	MOTOR TESTING														0
A-CTIT04	CIRCUIT BREAKERS	24													
A-CTIS16	MAIN CIRCUIT BREAKER & CONTROL SCHEME														0
A-CTIS17	CIRCUIT BREAKER OPERATION & CONTROL SCHEME														0
A-CTIT05	TRANSFORMER AND BUS PROTECTION	24													
A-CTIS18	POTENTIAL DEVICES AND TRANSFORMERS														0
A-CTIS19	4160 & 2400 VOLT CONTROL & TRANSFER SCHEMES														0
A-CTIS20	480 VOLT CONTROL AND TRANSFER SCHEMES														0
A-CTIS21	AUTO TRANSFER OF LIGHTING CIRCUITS FROM AC TO DC														0
A-CTIS22	INSTRUMENT AC TRANSFER SCHEMES														0
A-CTIS23	TRANSFORMER PROTECTION AND IT'S FUNCTION														0
A-CTIS24	BUS PROTECTION AND IT'S FUNCTION														0
A-CTIS25	EQUIPMENT RELAY PROTECTION AND IT'S FUNCTION														0
										LAST UPDATE ON:					Jul-20-95

			2nd 12 MONTHS												24 MONTH
	ELECTRICAL OJT		13	14	15	16	17	18	19	20	21	22	23	24	TOTALS
A-CTIT06	BATTERY CHARGERS AND INVERTERS	16													
A-CTIS26	INVERTERS ROTARY AND/OR SOLID STATE														0
A-CTIS27	BATTERY CHARGERS ROTARY AND/OR SOLID STATE														0
A-CTIT07	GROUND DETECTION	16													
A-CTIS28	GROUND DETECTION														0
A-CTIT08	ANNUNCIATOR SYSTEMS	24													
A-CTIS29	ANNUNCIATOR SYSTEMS														0
A-CTIT10	GENERATOR PRINCIPLES AND PROTECTION	32													
A-CTIS36	CONSTRUCTION OF GENERATORS														0
A-CTIS37	GENERATOR TESTING														0
A-CTIS38	SYNCHRONIZING (MANUAL OR AUTO)														0
A-CTIT11	VOLTAGE REGULATION AND EXCITATION	40													
A-CTIS39	VARIOUS TYPES OF EXCITERS (CONVENTIONAL)														0
A-CTIS40	VARIOUS TYPES OF VOLTAGE REGULATORS														0
A-CTIS41	RHEOSTATS														0
A-CTIS42	BASE/VOLTAGE ADJUSTERS														0
A-CTIS43	AMPLIDYNE EXCITERS														0
A-CTIS44	BRUSHLESS EXCITATION														0
A-CTIS45	MAGNETIC AMPLIFIERS														0
A-CTIS46	FIELD DISCHARGE RESISTORS														0
											LAST UPDATE ON:				Jul-20-95

A-CTBOJ001	ELECTRONICS OJT (BOTH)														
	TOTAL HOURS REQUIRED	340													
	TOTAL HOURS ACCUMULATED (24 MONTHS)	0	2nd 12 MONTHS												24 MONTH
			13	14	15	16	17	18	19	20	21	22	23	24	TOTALS
A-CTBT01	TRANSDUCERS														
A-CTBS01	ELECTRONIC COMPONENTS: TRANSDUCERS														0
A-CTBT02	POWER SUPPLIES														
A-CTBS02	ELECTRONIC COMPONENTS: POWER SUPPLIES														0
A-CTBT03	CONTROL SYSTEM MODULES														
A-CTBS03	ELECTRONIC COMPONENTS: CONTROL SYSTEM MODULES														0
A-CTBT04	PROCESS ANALYZERS														
A-CTBS04	ELECTRONIC COMPONENTS: PROCESS ANALYZERS														0
A-CTBT05	TURBINE GENERATOR CONTROL														
A-CTBS05	ELECTRONIC COMPONENTS: TURBINE GENERATOR CONTROL														0
A-CTBT06	PLANT SUPERVISORY& MONITORING SYSTEMS														
A-CTBS06	ELECTRONIC SYSTEMS: PLANT SUPERVISORY & MONITORING SYSTEMS														0
A-CTBT07	PLANT EQUIP PROTECTION & SAFETY SYSTEM														
A-CTBS07	ELECTRONIC SYSTEMS: PLANT EQUIPMENT PROTECTION & SAFETY SYSTEMS														0
										LAST UPDATE ON:					Jul-20-96

A-CTBOJ002	COMPUTER SYSTEMS OUT (BOTH)															
	TOTAL HOURS REQUIRED	275														
	TOTAL HOURS ACCUMULATED (24 MONTHS)	0	2nd 12 MONTHS													24 MONTH
			13	14	15	16	17	18	19	20	21	22	23	24	TOTALS	
A-CTBT08	COMPUTER MAIN FRAME															
A-CTBS10	CPU														0	
A-CTBS11	DMA														0	
A-CTBS12	FLOATING POINT														0	
A-CTBT09	INPUT/OUTPUT															
A-CTBS13	TIMING AND MULTIPLEX														0	
A-CTBS14	ANALOG INPUT														0	
A-CTBS15	ANALOG OUTPUT														0	
A-CTBS16	INTERRUPTS														0	
A-CTBS17	CONTACT INPUT														0	
A-CTBS18	CONTACT OUTPUT														0	
A-CTBT10	AUXILIARY MEMORY DEVICES															
A-CTBS19	HIGH SPEED MEMORY														0	
A-CTBS20	HARD DISK														0	
A-CTBS21	FLOPPY DISK														0	
A-CTBS22	STATIC BULK														0	
A-CTBT11	ENGINEER'S/PROGRAMMER'S CONSOLE															
A-CTBS23	PAPER TAPE READER														0	
A-CTBS24	PAPER TAPE PUNCH														0	
A-CTBS25	PRINTER														0	
A-CTBT12	OPERATOR'S CONSOLE															
A-CTBS26	VISUAL DISPLAYS/CRTs														0	
A-CTBS27	MANUAL/AUTO STATIONS														0	
A-CTBS28	PANEL PUSHBUTTONS														0	
										LAST UPDATE ON:					Jul-20-95	

	PLANT SPECIFIC OJT (INSTRUMENT REPAIRMAN)														
	TOTAL HOURS REQUIRED	143													
	TOTAL HOURS ACCUMULATED (24 MONTHS)	0	2nd 12 MONTHS												24 MONTH
			13	14	15	16	17	18	19	20	21	22	23	24	TOTALS
	CONTROL CIRCUIT TROUBLESHOOTING														0
	ELECTRICAL SCHEMATICS/PRINT CORRECTIONS														0
	GENERATOR BRUSH MAINTENANCE														0
	BATTERY MAINTENANCE TRAINING														0
	HIGH VOLTAGE:														
	SAFETY														0
	GROUNDING														0
	TESTING														0
	WORK														0
	ELECTRICAL TEST EQUIPMENT:														
	EPOCH														0
	HI-POT														0
	MEGGER														0
	AMMETERS														0
	BREAKER TEST SET														0
	KELVIN BRIDGE														0
	MICRO-OHMMETER														0
	HOT STICK														0
	TROUBLESHOOTING GROUNDS:														
	DC														0
	480 VOLT														0
	4160 VOLT														0
	MOTOR MAINTENANCE TESTING:														
	MEGGERING														0
	HI-POT														0
	GROWLER														0
	SURGE CAPARISON														0
	MOTOR MAINTENANCE OVERHAUL:														
	DISASSEMBLY														0
	CLEAN & INSPECTION														0
	BEARING & OIL														0
	REASSEMBLY														0
	WIRE/UNWIRE MOTORS:														
	TAPING CAUTIONS														0
	ROTATION CHECK														0
	BREAKERS														0
	MOTOR OPERATED VALVES														0
	TRANSFORMERS 18 KV TO 480 VOLT														0
	CRANES AND ELEVATORS														0
	CONDUIT AND WIRE PULLS														0
	PCBs														0
											LAST UPDATE ON:				Jul-20-95

	PLANT SPECIFIC OJT (BOTH)														
	TOTAL HOURS REQUIRED	120													
	TOTAL HOURS ACCUMULATED (24 MONTHS)	0	2nd 12 MONTHS												24 MONTH
			13	14	15	16	17	18	19	20	21	22	23	24	TOTALS
	BOILER & TURBINE SAFEGUARD SYSTEMS														
	COLD AIR TEST														0
	TURBINE TRIP TEST														0
	OPERATIONAL TRIP TEST														0
	DISTRIBUTIVE CONTROL SYSTEMS														
	GENERAL TRAINING (BAILEY)														0
	PCU														0
	CAD														0
	TEXT														0
	COMBUSTION CONTROLS														
	PNEUMATIC (ENHANCEMENT)														0
	PLANT SPECIFIC														0
	FLAME SCANNERS														0
	TURBINE SUPERVISORY INSTRUMENTATION														
	MONITORS AND SYSTEMS														0
	VIDEO TAPE														0
	ANALYZING DATA														0
	PREDICTIVE MAINTENANCE VIBRATION DATA COLLECTION														0
	PRINT READING:														
	DCS LOGIC														0
	CONTROL PRINTS/COMBUSTION CONTROLS														0
	VSD MOTOR CONTROLS														0
	REVERSE OSMOSIS SYSTEM														0
	GAS CHROMATOGRAPHY														0
	DEH AND TURBINE CONTROLS														0
	CONTROL LOOP TUNING														0
	SEQUENCE OF EVENTS LOGIC														0
	BURNER VIDEO MONITORING SYSTEM														0
	PROGRAMMABLE LOGIC CONTROLLERS (A.B.)														0
	CEMS														0
										LAST UPDATE ON:					Jul-20-95