



Training Proposal for:

Los Angeles & Orange Counties Air Conditioning and Refrigeration Joint Journeyman and Apprentice Training Committee

Agreement Number: ET17-0908

Panel Meeting of: September 23, 2016

ETP Regional Office: North Hollywood

Analyst: M. Paccarelli

PROJECT PROFILE

Contract Attributes:	Retrainee Priority Rate Apprenticeship Veterans	Industry Sector(s):	Construction Priority Industry: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Counties Served:	Los Angeles, Orange, San Bernardino, Riverside, San Diego, Ventura, Santa Barbara, San Luis Obispo	Repeat Contractor:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Union(s):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Steam-Refrigeration-Air Conditioning-Pipefitters and Apprentices of the United Association of the United States and Canada, Local Union 250		
Turnover Rate:	≤20%		
Managers/Supervisors: (% of total trainees)	0%		

FUNDING DETAIL:

Program Costs	+	Support Costs	=	Total ETP Funding
\$562,200		\$38,860 8%		\$601,060

In-Kind Contribution:	50% of Total ETP Funding Required	Inherent
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TRAINING PLAN TABLE

Job No.	Job Description	Type of Training	Estimated No. of Trainees	Range of Hours		Average Cost per Trainee	Post-Retention Wage
				Class / Lab	CBT		
1	Retrainee Apprentice Priority Rate	Commercial Skills	130	8-200	0	\$2,502	\$25.47
				Weighted Avg: 180			
2	Retrainee Journeyman Priority Rate	Commercial Skills, OSHA 30	120	8-200	0	\$1,411	\$42.50
				Weighted Avg: 60			
3	Retrainee Priority Rate	Commercial Skills	40	8-200	0	\$1,411	\$21.28
				Weighted Avg: 60			
4	Retrainee Apprentice Priority Rate Veteran	Commercial Skills	20	8-200	0	\$2,502	\$25.47
				Weighted Avg: 180			

Minimum Wage by County: \$21.28 per hour Statewide (Priority Industry)

Health Benefits: Yes No This is employer share of cost for healthcare premiums – medical, dental, vision.

Used to meet the Post-Retention Wage?: Yes No Maybe

Up to \$6.28 per hour may be used to meet the Post-Retention Wage in Job Number 3.

Wage Range by Occupation

Occupation Titles	Wage Range	Estimated # of Trainees
JOB NUMBER 1 & 4		
Apprentice HVAC Technician		150
JOB NUMBER 2		
Journeyman HVAC Technician		110
HVAC Foreman		10
JOB NUMBER 3		
Mechanical Equipment Serviceman (MES)*		25
Tradesman**		15

*The MES classification includes personnel with experience, but little to no formal training. It is an intermediate classification created through collective bargaining, with salaries and skills lower than a journeyman. Workers in this classification neither complete an apprenticeship nor receive apprentice training.

**The Tradesman classification is for entry-level helpers, drivers, parts persons, and yard workers. Tradesmen may become apprentices and advance to journeyman status. Under the collective bargaining agreement, Tradesman may be paid a \$15.00 per hour base, although they are actually paid a higher

wage according to the JJATC. Tradesman will meet the SET Priority Industry wage of \$21.28 per hour if they participate in training funded by ETP.

Both occupations were created through collective bargaining under a lower wage scale that allows the union contractors to better compete. They are represented, and their scope of work is set forth, in the collective bargaining agreement. Their total compensation includes payment into the JJATC trust fund.

INTRODUCTION

The Los Angeles & Orange Counties Air Conditioning and Refrigeration Joint Journeymen and Apprentice Training Committee (JJATC) (www.hvacr-training.com) was founded in 1949 by a consortium of labor and management organizations to provide training for air conditioning and refrigeration technicians in Southern California. The JJATC administers a training trust fund created through collective bargaining and funded by signatory employers.

This will be JJATC's fourth ETP Agreement. However, this is the first time Veterans have been included as a discrete cohort of Apprentice trainees. In this proposal, training will continue for apprentices, journeymen, and workers in special "helper" classifications. Training includes inspection, service, maintenance, start-up, testing, balancing, adjusting, repair modification and replacement of mechanical and refrigeration equipment. These workers are represented by the Steam-Refrigeration-Air Conditioning-Pipefitters and Apprentices of the United Association of the United States and Canada, Local Union 250. Trainees work for contractors who serve a wide variety of industrial and commercial businesses throughout Southern California.

Employer Demand

The Air Conditioning & Refrigeration Contractors Association of Southern California represents employers in this project. Employer demand continues to be strong for experienced workers and new apprentices to install and maintain complex electronically-controlled equipment, and to meet new building standards for energy efficiency. Trainees work for contractors who serve a wide variety of industrial and commercial businesses throughout Southern California.

Energy efficiency regulations are changing the industry, especially in California. The California Building Energy Efficiency Standards, also known as Title 24, require higher levels of efficiency from air conditioning and refrigeration systems. This includes new types of equipment and controls (i.e. setting up zones so only occupied portions of a building are cooled). Title 24 also sets standards for commercial refrigeration including supermarkets. These standards are part of California's response to AB 32, the Global Warming Solutions Act of 2006, which mandates that California reduce its greenhouse gas emissions to 1990 levels by 2020.

Apprenticeship Pilot

The Panel is authorized to fund Apprentice training that does not displace any other source of government funds, or replace an existing apprenticeship program approved by the Division of Apprenticeship Standards (DAS). ETP funding is designed to supplement cost of delivery for the Related and Supplemental Instruction (RSI) portion of DAS-approved apprenticeship training. Depending on the type of trade, apprenticeship programs vary in length. In this case the program is four years.

Apprentice programs are typically sponsored by a Joint Apprenticeship Training Committee (JATC). A JATC is created through collective bargaining, with an equal number of members appointed by union and management with employer contributions to a training trust fund. The employers are not "participants" but are signatories to the Collective Bargaining Agreement.

RSI is traditionally delivered as class/lab, and ETP does not reimburse CBT delivery for apprenticeship training. The curriculum is developed with input from DAS and a designated Local Educational Agency (in this case Los Angeles County Office of Education). The Apprenticeship Program allows reimbursement for up to 200 hours of RSI per apprentice. (Journeymen are capped at 200 hours.)

For the building trades, where it is not customary for workers to be employed for 90 consecutive days with one employer, the Panel may substitute hours worked for retention. In that instance, the Panel may substitute non-consecutive hours worked for retention. This modified retention period must be no less than 500 hours within 272 days with more than one employer. Both the standard and modified retention periods will apply to this proposal.

To ensure ETP does not displace Montoya Funds, Apprenticeship reimbursement is reduced by \$5, reducing the priority industry rate from \$18 to \$13 per hour. In addition, the Panel adopted a "blended rate" for Journeymen, reflecting the fact that they may be employed by a variety of contractors over the two-year term of contract ranging from large employers, to small (≤ 100 employees). This is \$22 per hour, midway between the Priority Industry standard rate (\$18) and Small Business rate (\$26).

The ETP wage for Apprentices is no less than \$21.28 per hour, tracking the Special Employment Training wage as modified for priority industries. However, the actual wages paid are shown in the Training Plan Table and contract when they exceed \$21.28, for both Apprentices and Journeymen.

PROJECT DETAILS

Curriculum Development

The proposed training program was developed by a joint labor-management committee comprised of employer and union representatives to address the demands driven by new building standards for energy efficiency. The committee also continuously reviews and updates curriculum, training materials, and training facilities based upon the industry expertise of its membership.

The JJATC conducts assessments at the conclusion of each training session to evaluate program effectiveness. Trainees and employers are encouraged to provide feedback through their representatives on the Committee and directly to training personnel at the JJATC.

Training Plan

Training will give workers the skills they need to complete jobs quickly with the highest quality workmanship and give employers the capacity to expand in California as the economy improves. Training will be delivered by experienced journeyman workers in the trade at the JJATC's training facilities in Los Angeles, Bakersfield, San Luis Obispo, and San Diego.

Commercial Skills (97%) - Training will be offered to all occupations on installation, troubleshooting and repairing air conditioning and refrigeration components and systems. Training will include instruction in the use of electrical controls, digital controls, and new equipment. In-depth training in the principles of air conditioning and refrigeration, including thermodynamics, energy efficiency rating and coefficient of performance calculations, will also be provided. Workers who install and service supermarket refrigeration systems will receive specialized training.

OSHA 30 (3%) - Training will be delivered to Journeyman trainees to ensure safe working conditions and fulfill current mandates requiring 25% to 40% of an employer's on-site workforce be OSHA certified. This training is a series of courses "bundled" by industry sector and occupation consisting of 30 hours of training for journeyman trainees.

This training is not required as a condition of doing business in California. However, the coursework must be approved by, and the instructors must be certified by Cal-OSHA. When delivery is by CBT all training hours must be delivered in a classroom over a finite amount of time, and the vendor must have a certified instructor present to confirm attendance.

Completion of the training results in a certificate that expands employment opportunities. To ensure that each trainee receives certification, ETP will only consider payment earned upon completion of the full 30-hour course. OSHA 30 is not included in the 10% limitation on safety training.

Impact/Outcome

Apprentices will be certified as journeyman once they complete the entire apprentice curriculum. Journeymen will receive an industry certificate for completing the HVAC core course and an Energy Auditor certificate for completing the energy auditing course.

Marketing and Support Costs

Participating employers are notified of training through the Air Conditioning, Refrigeration and Mechanical Contractors Association of Southern California via websites, mailings and presentations. Workers are notified of training through their union local and directly by the training center through website postings and mailings.

The JJATC is requesting 8% support costs to assist in Apprentice recruitment, employer outreach, and assessment of employer-specific job requirements. Although many of the participating employers have already been notified, additional outreach and needs assessments will take place throughout the Agreement term. Staff recommends the 8% support costs.

Veterans

Training for Veterans in Job Number 4 will be the same as Apprentice training in Job Number 1. These trainees are in a separate Job Number to better track performance toward the goal of improved outreach for Veterans. Veterans who apply for an apprenticeship receive direct entry into the program, which includes training and assistance in finding work with employers throughout the area at no cost to them. JJATC is committed to supporting job-related training that helps Veterans transition into the California workforce.

Commitment to Training

Employers will continue to make contributions to the training trust for every hour worked by Apprentices and Journeymen. Safety training is, and will continue to be, provided by the participating employers in accordance with all pertinent requirements under state and federal law.

➤ Training Infrastructure

Project administration will be performed by a partnership of the JJATC, the Los Angeles Unified School District (LAUSD) and Steve Duscha Advisories. The JJATC will handle class scheduling and completion of training rosters. The two administration vendors will assist

with employer liaison, documenting work hours, uploading training and enrollment data, ETP reporting, and related activities.

Electronic Recordkeeping

ETP staff has reviewed and approved the use of a Learning Management System for recordkeeping.

RECOMMENDATION

Staff recommends approval of this proposal.

ACTIVE PROJECTS

The following table summarizes performance by the JJATC under an active ETP Agreement:

Agreement No.	Approved Amount	Term	No. Trainees (Estimated)	No. Completed Training	No. Retained
ET15-0921	\$299,886	03/02/15– 03/01/17	174	251	17

JJATC's projected performance is 100% based on the total reimbursable hours of \$23,660 entered into the ETP Online System. These hours are sufficient to support earnings of the full encumbered amount (\$299,886). All trainees are expected to complete the retention period by the end of the 2016, at which time, JJATC will submit the Final Closeout Invoice.

PRIOR PROJECTS

The following table summarizes performance by the JJATC under an ETP Agreement that was completed within the last five years:

Agreement No.	Location (City)	Term	Approved Amount	Payment Earned \$ %
ET14-0905	Los Angeles	11/16/2013– 11/15/2015	\$443,690	\$443,690 (100%)
ET13-0902	Los Angeles	09/01/2012– 08/31/2014	\$415,381	\$415,381 (100%)

DEVELOPMENT SERVICES

Steve Duscha Advisories in Sacramento assisted with development of this proposal for a flat fee of \$10,000.

ADMINISTRATIVE SERVICES

Steve Duscha Advisories and the Los Angeles Unified School District in Los Angeles will perform administrative services for a total combined fee not to exceed 13% of payment earned.

TRAINING VENDORS

N/A

Exhibit B: Menu Curriculum**Class/Lab Hours**

8-200

Trainees may receive any of the following:

Job Numbers 1 & 4 APPRENTICE**COMMERCIAL SKILLS**

- ✚ Air Conditioning HVAC Troubleshooting V
- ✚ Air Conditioning: Market Systems for HVAC Mechanics
- ✚ Compressors III
- ✚ Customer Relations II Lecture (9 Weeks)
- ✚ Direct Digital Controls III
- ✚ Electrical Controls II
- ✚ Electrical Controls III
- ✚ Heat Loads & Air Distribution IV
- ✚ HVAC Start Test Balance V
- ✚ HVAC Systems IV
- ✚ Hydronic Troubleshooting V
- ✚ Installation II
- ✚ Market Applications IV
- ✚ Pneumatics IV
- ✚ Safety
- ✚ Thermodynamics III
- ✚ Variable Frequency Drives V
- ✚ Water Chillers V

Job Number 2**JOURNEYMAN****COMMERCIAL SKILLS**

- ✚ Absorption Chillers
- ✚ Belimo Motors
- ✚ Boilers
- ✚ Centrifugal
- ✚ Combustion Analysis
- ✚ Compressors
- ✚ Customer Relations
- ✚ DDC
- ✚ ECM Motors
- ✚ Electrical Code
- ✚ Electrical Controls
- ✚ Electrical for Start-up
- ✚ Electrical Protocol Electronic Variable Speed Drives
- ✚ Energy Audit
- ✚ Energy Retrofit
- ✚ Evap. Cond/Cooling Towers
- ✚ Green Professional Building Skills-UA Certificate Program
- ✚ GreenChill
- ✚ HVAC Core
- ✚ Market Core
- ✚ Market EMS E-2/Control.

- ✚ Mechanical Code
- ✚ National Environmental Balancing Bureau (NEBB)
- ✚ Pneumatics
- ✚ Project Management
- ✚ Refrigerant Piping
- ✚ Screw Chillers
- ✚ Solar
- ✚ Thermal Energy Storage
- ✚ Title 24
- ✚ Vane Axial Fans
- ✚ Variable Air Volume (VAV) Systems

OSHA 30 (OSHA Certified Instructor)

- ✚ OSHA 30 (requires completion of full 30-hour course)

Job Number 3

MES/TRADESMAN

COMMERCIAL SKILLS

- ✚ Electrical
- ✚ Mechanical
- ✚ Brazing & Soldering
- ✚ Package Systems
- ✚ Advanced Troubleshooting Techniques
- ✚ Refrigerant Controls
- ✚ Electrical Controls

Note: Reimbursement for retraining is capped at 200 total hours per trainee, regardless of method of delivery.