



Training Proposal for:

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

Agreement Number: ET15-0921

Panel Meeting of: February 20, 2015

ETP Regional Office: North Hollywood

Analyst: M. Reeves

PROJECT PROFILE

Contract Attributes:	Retrainee Priority Rate Apprenticeship	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
\$280,464		\$19,422 8%		\$299,886

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 OSHA 10	92	8-210	0	\$2,002	\$20.55
				Weighted Avg: 144			
2	Retrainee Journeyman Priority Rate	Commercial Skills OSHA 30	50	8-200	0	\$1,411	\$41.29
				Weighted Avg: 60			
3	Retrainee Priority Rate	Commercial Skills	32	8-200	0	\$1,411	\$20.55
				Weighted Avg: 60			

Minimum Wage by County: \$20.55 per hour SET Statewide wage for priority industries.
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
 \$1.05 per hour may be used to meet the Post-Retention Wage for trainees in Job Number 3.

Wage Range by Occupation		
Occupation Titles	Wage Range	Estimated # of Trainees
Job Number 1		
Apprentice HVAC Technician		92
Job Number 2		
Journeyman HVAC Technician		40
HVAC Foreman		10
*Job Number 3		
Mechanical Equipment Serviceman (MES)		17
**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.

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.

**Under the collective bargaining agreement, Tradesmen may be paid a \$10.00 per hour base, although they are actually paid a higher wage according to the JJATC. Tradesmen will meet the SET Priority Industry wage of \$20.55 per hour if they participate in training funded by ETP.

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 and is located in downtown Los Angeles. The JJATC administers a training trust fund created through collective bargaining and funded by signatory employers.

This will be the third Agreement between ETP and the JJATC. Technician training includes the inspection, service, maintenance, start-up, testing, balancing, adjusting, repair, and replacement of mechanical and refrigeration equipment. The proposed training targets workers 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. The contractors are represented by the Air Conditioning and Refrigeration Contractors Association of Southern California.

Demands for energy efficiency are changing the industry, especially in California. The California Building Energy Efficiency Standards, codified in regulations under 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.

Employer Demand

Employer demand continues to be strong for experienced workers and new apprentices to install and maintain complex electronically-controlled equipment as needed to meet energy conservation standards. JJATC staff reports that September 2014 saw the largest group of first-time apprentices in recent years, a trend that is expected to repeat in September 2015. Furthermore, the number of journeyman trainees has outpaced the number of apprentices, demonstrating the overwhelming need to learn new skills.

This proposal will continue training began in the prior contracts. In this program, the JJATC will expand its first-time apprentice training and allow continuing apprentices and journeymen to hone their skills and advance.

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). The Panel provides reimbursement for the Related and Supplemental Instruction (RSI) portion of an apprenticeship training program. RSI is delivered as class/lab training and developed with a Local Educational Agency (Los Angeles County Office of Education). The program provides reimbursement for up to 200 hours of RSI plus OSHA 10. All training will be class/lab.

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. The modified retention period must be no less than 500 hours within 272 days with more than one employer. The JJATC is requesting this modified retention period.

To ensure ETP does not displace Montoya Funds, Apprenticeship Pilot reimbursement is reduced by \$5.00, reducing the priority industry rate from \$18.00 to \$13.00 per hour. The ETP wage requirement for Apprentices is \$20.55 per hour. This is the Special Employment Training Statewide wage as modified for priority industries which is being used for all apprentice occupations, for ease of administration.

DAS Completion Rates

The completion rate for this DAS-approved program for 2008-2012 is 77.6% and exceeds the industry completion percentage of 65.8%.

PROJECT DETAILS

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 is scheduled to begin March 1, 2015 and last for approximately one year. Training will be delivered by experienced journeyman workers in the trade at the JJATC's Los Angeles training center. No outside training vendors will be used.

Commercial Skills (97%) - Training will be offered to all occupations in installation, repair, and maintenance of energy efficient HVAC systems and emphasizing use of electrical and digital controls and new equipment required by today's HVAC industry. Trainees will be taught how to select components and lay out systems for maximum efficiency. Course work will also include theory and principles in Thermodynamics. Specialized training will be given to workers who install and service supermarket refrigeration systems.

OSHA 10/30 (3%) - Training will be delivered to Apprentice and 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.

OSHA 10/30 training is a series of courses "bundled" by industry sector and occupation. It consists of 10 hours of training for journey-level and 30 hours for frontline supervisors.

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 10-hour or 30-hour course. OSHA 10/30 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. Trainees who complete the OSHA 10 or OSHA 30 course will receive a certification.

Curriculum Development and Feedback

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 and Local Union 250 communicate employer needs (including requests for training in specialty areas and general worker shortages) to the JJATC. 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.

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.

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 Coordination

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 in employer liaison, documentation of work hours, uploading training and enrollment data, ETP reporting, and related activities.

Electronic Recordkeeping

ETP staff has 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
ET14-0905	\$443,690	11/16/2013– 11/15/2015	260	302	97

26,783 reimbursable hours entered into the ETP Online Tracking System.

The Contractor projects final earnings of 100% based on training currently committed and in progress. This is supported by the Tracking System.

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 \$ %
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**

8-210 (Job Number 1)

Trainees may receive any of the following:

APPRENTICE**COMMERCIAL SKILLS**

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

0-10

OSHA 10 (OSHA Certified Instructor)**Class/Lab Hours**

8-200 (Job Number 2)

JOURNEYMAN**COMMERCIAL SKILLS**

- ✚ Absorption Chillers
- ✚ Centrifugal
- ✚ Compressors
- ✚ Direct Digital Controls
- ✚ Electrical Code
- ✚ Electrical Controls
- ✚ Electrical Protocol
- ✚ Electronic Variable Speed Drives
- ✚ GreenChill
- ✚ HVAC Core
- ✚ Energy Retrofit
- ✚ Market EMS E-2/Control
- ✚ Mechanical Code
- ✚ National Environmental Balancing Bureau
- ✚ Pneumatics
- ✚ Project Management
- ✚ Refrigerant Piping
- ✚ Thermal Energy Storage

0-30

OSHA 30 (OSHA Certified Instructor)**Class/Lab Hours**

8-200 (Job Number 3)

MECHANICAL EQUIPMENT SERVICEMAN/TRADESMAN**COMMERCIAL SKILLS**

-  Mechanical Systems
-  Electrical Systems
-  Soldering and Brazing
-  Troubleshooting
-  Controls
-  Refrigerants
-  Economizers
-  Boilers
-  Hydronics

Note: Reimbursement for retraining is capped at 210 total hours per trainee for Job Number 1, and 200 total hours per trainee for Job Numbers 2 & 3, regardless of method of delivery.