Amendment Proposal #1 for:

Kern County Electrical Joint Apprenticeship & Training Committee

Agreement Number: ET15-0920

Amendment Effective Date: May 26, 2016

Panel Meeting of: May 26, 2016

ETP Regional Office: North Hollywood **Analyst:** L. Vuong

CURRENT PROJECT PROFILE

Contract Type:	Priority Retrainee Apprentice	Industry Sector(s):	Construction
Counties Served:	Kern	Repeat Contractor:	☐ Yes ☒ No
Union(s):	☒ Yes ☐ No	Priority Industry:	☒ Yes ☐ No

Current Contract Term: February 23, 2015 to February 22, 2017

Current Funding	In-Kind Contribution
$267,160	Inherent

AMENDMENT FUNDING

Requested Funding	Support Costs	Amendment Funding	In-Kind Contribution
+$43,620	+$3,015	+$46,635	Inherent

Total Funding
$313,795

AMENDMENT 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	Priority Rate Retrainee Journeyman	Business Skills, Commercial Skills, Computer Skills, OSHA 10/30	35	8-200	0	**$705**	$36.65
				Weighted Avg: **30**			
2	Retrainee Apprentice	Commercial Skills, OSHA 10	89	8-210	0	$2,780	$20.55
				Weighted Avg: 200			
3	**PHASE II Retrainee Apprentice**	**Commercial Skills, OSHA 10**	**15**	**8-210**	**0**	**$2,780**	**$21.28**
				Weighted Avg: 200			

Minimum Wage by County: Job Number 1 & 2(2015)(SET/Priority Industry): $20.55

Job Number 3 (2016)(SET/Priority Industry): $21.28

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 $0.39 per hour may be used to meet the Post-Retention Wage in Job Number 2 and up to $1.12 per hour in Job Number 3.

Wage Range by Occupation	
Occupation Title	Wage Range
Journeyman Electrician/Inside Wireman	
Apprentice Electrician/Inside Wireman	

INTRODUCTION

Kern County Electrical Joint Apprenticeship & Training Committee (Kern Electrical JATC) is a nonprofit training organization dedicated to providing up-to-date industry skills training and secure high-quality job opportunities for its members. Founded over 52 years ago, the JATC trains Electricians to install power, lighting, controls and other electrical equipment in commercial, industrial and residential facilities. Kern Electrical JATC is governed by a Board of Trustees comprised of three labor and three management representatives, and is a joint effort of the International Brotherhood of Electrical Workers (IBEW) Local 428 and the National Electrical Contractors Association (NECA). Kern Electrical JATC is located in Bakersfield and proposes to train Journeymen and Apprentice Electricians, all of whom are members of IBEW Local 428.

Kern Electrical JATC provides training to workers for commercial, industrial and oil field projects with local signatory contractors. Journeyman and Apprentice Electricians will be working on utility grade solar projects that are both planned and currently under construction. Most of these solar projects are expected to reach completion in 2016. In addition, it is anticipated that some of the Electricians trained under this proposal will work on oil refinery upgrade projects, as well as on a local Hydrogen Energy California plant that is projected to be operational in the near future.

AMENDMENT DETAILS

The ETP training is currently being provided for Journeyman and Apprentice trainees and is progressing better than anticipated. The Contractor was conservative in their original request for funding; however, there is now more demand for training from participating employers. To date, the Contractor has delivered enough training hours to exhaust its current ETP training funds in Job Number 1 (Journeyman). Therefore, the Contractor is requesting additional ETP funds to provide training for trainees currently enrolled (Job Number 1); and add additional funding for 15 Apprentices (Number 3) (Phase II). The additional funding will allow the Contractor to implement its original training plan to accommodate participating employers' demand.

To date, the ETP online Tracking System shows that the Contractor has provided 77% in eligible Class/Lab training hours. The Contractor anticipates completing 100% of the training hours. Trainees are enrolled in an aggressive training plan (Monday to Thursday, for three to eight hours daily).

This Amendment will increase the Agreement amount from $267,160 to $313,795, and the number of trainees from 124 to 139. It also will increase the weighted average hours of training from 24 to 30, and the average cost per trainee from $564 to $705 in Job Number 1. With eight months (11/21/16) of training remaining in the contract term, the Contractor is confident that they can earn the increased amount. There will be no changes to curriculum or trainee wages.

RECOMMENDATION

Staff recommends approval of this Amendment.

CURRENT CONTRACT PERFORMANCE

The following table summarizes performance by Kern Electrical JATC under the current ETP Agreement:

Agreement No.	Approved Amount	Term	No. Trainees (Average)	No. Completed Training	No. Retained
ET15-0920	$267,160	02/23/15 – 02/22/17	124	TBD	TBD

Based on ETP Systems, 14,194 reimbursable hours have been tracked for potential earnings of $206,368 (77% of approved amount). The Contractor projects final earnings of 100% based on training currently committed to by employers and in progress through November 21, 2016.

Exhibit B: Menu Curriculum

Class/Lab Hours

8 – 200 (Job Number 1)

Trainees may receive any of the following:

Journeyman Training

COMMERCIAL SKILLS

- Codeology:
  - National Electrical Code
  - Other Recognized Standards (Installation Changes)
  - Plan, Build and Use
  - Related Standards (Mandatory and Permissive Rules)
  - Special Occupancies and Equipment
  - Arc Flash

- Analog/Digital Circuit (AC/DC) Principles:
  - Math for Electricians
  - Ohm's Law
  - Generators
  - Inductance/Reactance
  - Series/Parallel Circuits

- Grounding:
  - Grounding and Bounding
  - National Electrical Code Article 100-Definitions and Provisions
  - National Electrical Code Article 110-Requirements
  - National Electrical Code Article 90-Introduction
  - National Electrical Code Article Chapters 1-4
  - Significant Changes to National Electric Code

- Fire Alarm Systems and Installations:
  - Definitions and Systems
  - Initiating Devices and Notification Systems
  - National Electrical Code and Installation Requirements
  - Start Up and Check Out Procedures
  - National Fire Protection Act, 1972 (NFPA 72)

- Fire Life Safety:
  - National Electrical Code (Relating to Fire Alarms)
  - National Electrical Code Article 725
  - National Electrical Code Article 760
  - NFPA 72
  - Principles of Electronics

- Industrial Motor Control:
  - Control Relays and Timers
  - Jogging and Plugging Controls
  - Manual Starters and Magnetic Coils
  - Push Buttons, Selector Switches, and Mechanical Devices
  - Solid State Electronic Devices
  - Variable Frequency Drives

- Programmable Logic Control (PLC):
  - Developing Ladder Programming
  - Introduction to Programmable Equipment
  - Programming Programmable Logic Controllers
  - Using Timers and Counters in Logic Programs
  - Writing a Program

- Electrical Design:
  - 3 and 4-Way Switching
  - Design of Electrical Circuits
  - Magnetic Motor Control and the Code
  - LonWorks and Building Automation
  - Transformers and the Code

- Voice, Data and Video:
  - Audio Distribution
  - CCTV Security Surveillance
  - Computer Networking
  - Fiber Optics
  - Telephonic Interconnect

- Industry Specific Skills:
  - Solar Panel Installation
  - Solar Photovoltaics
  - Building Automation Systems
  - Confined Space Entry
  - Specialized Tools
  - Conduit Bending
  - Rigging and Lifting
  - Firestop Installation
  - Blueprints and Schematics
  - Work Flow and Resources
  - Proper Installation and Use of Testing and Auditing Materials and Equipment (Green Training)
  - Understanding New Technologies and Changes to Industry Standards (Green Training)
  - Proper Equipment Set-Up (Green Training)
  - Safe Working Practices
  - Advanced Instrumentation and Motor Controls
  - Programmable Logic Controllers

- Advanced Welding
- Architecture Designs and Advanced Plan Reading
- Management and Monitoring of Materials
- Testing Materials and Equipment–Proper Set-Up and Use (Green Training)
- Understanding Changes to Industry Standards (Green Training)

- California Advanced Lighting Control Program (CALCP)
  - Advanced Lighting Control Systems
  - Lighting Control Strategies
  - Line Voltage Switching Controls
  - Low Voltage Switching Control
  - Dimming Controls
  - Occupancy Sensors
  - Photosensors

- CALCTP Acceptance Testing
- Electric Vehicle Infrastructure Training Program (EVITP)

BUSINESS SKILLS

- Teambuilding Skills
- Green Awareness Training and Green Certifications
- Leadership Skills
- Customer Service Skills
- Conflict Resolution
- Problem Solving
- Decision Making Skills
- Inventory Checklist
- Advanced Time Management
- Filling Out Work Documents and Reports Accurately
- Project Management
- Creating Project Bids

COMPUTER SKILLS

- Auto Computer-Aided Design (AutoCAD)
- Job Tracking System
- Scheduling & Planning Jobs

0-30 **OSHA 10/30 (OSHA CERTIFIED INSTRUCTOR)**

Class/Lab Hours
8 – 210 (Job Numbers 2 & **3**)

Apprentice Training

COMMERCIAL SKILLS

- Safety:
  - General Job-Site Safety Awareness
  - First Aid/CPR Certification
  - Emergency Procedures
  - Compliance with OSHA, NFPA and EPA Regulations
  - Substance Abuse Awareness

- Tools, Materials and Handling:
  - Proper Care and Use of Hand and Power Tools
  - Proper Rigging Methods
  - Proper Digging Techniques
  - Proper Use of Motorized Equipment; Platform Lifts, Fork-Lifts & Bucket Trucks
  - Proper Material Lifting and Handling

- Math:
  - Appropriate Mathematical Calculations to Solve for Related Problems.

- Electrical Theory:
  - Basic Electro-Magnetic Principals
  - Ohm's Law
  - AC/DC Theory
  - Series, Parallel and Combination Circuits
  - Characteristics of Circuits; Voltage, Current, Power, Resistance, Impedance, Capacitance and Reactance.
  - Theory of Superposition and Solving for Multiple Voltage-Sourced Circuits
  - Operation and Characteristics of Three-Wire Systems
  - Operation and Characteristics of Three-Phase Systems
  - Use of Electronics in the Electrical Industry
  - Code Requirements
  - National Electrical Code and Local Codes

- Conductors:
  - General Characteristics
  - Conductor Installation Codes and Techniques
  - Methods for Selecting Proper Size and Type of Conductors

- Conduit and Raceways:
  - Terms Associated with Conduits and Raceways
  - Procedures for Laying Out Various Types of Bends
  - Procedures for Making Proper Bends when Fabricating Conduits
  - Conduit Support Systems Recognized by Code

- First Aid/CPR

- Lighting Systems:
  - Function, Operation and Characteristics of Various Lighting Systems
  - Lighting Distribution and Layout

- Installation and Connection of Fixtures:
  - Over-Current Devices
  - Function, Operation and Characteristics of Over-Current Protection Devices
  - NEC Requirements for Over-Current Protection Devices
  - NEC Requirements for Ground-Fault and Arc-Fault Protection

- Grounding Systems:
  - Functions, Operation and Characteristics of Grounding Systems
  - Sizing, Layout and Installation of Grounding Systems
  - Insulation and Isolation
  - Proper Grounding and Bonding Techniques
  - Special Circumstances

- Services and Distribution Systems:
  - Function, Operation and Requirements for Various Panel Boards and Switch Gear
  - Grounding Requirements
  - Code Requirements

- Prints and Specifications:
  - Creation of Blueprints Plans and Specification
  - Use of Blueprints, Plans and Specification
  - Recognizing Information Contained within Blueprints

- Motors, Motor Controllers and Process Controllers:
  - Function, Operation and Characteristics of Motors (AC, DC, Dual-Voltage)
  - Proper Motor Installations
  - Motor Controllers, Control Circuits and Control Devices
  - Control Transformers, Switches and Relays
  - Instrumentation, Process Control Systems and Devices

- Generation and Power Supplies:
  - Principles of Generating Electricity
  - Principles of Alternative Energy Generating Systems
  - Installation and Maintenance of Uninterruptible Power Supplies (UPS)
  - Installation and Maintenance of Emergency Battery Systems

- Transformers:
  - Function, Operation and Characteristics of Transformers
  - Selection and Installation of Transformer Types
  - Transformer Grounding Techniques
  - Harmonics and Power Quality

- Personal Development:
  - Orientation to Organization and Structures
  - Working with Others
  - Personal Financial Development

- Electrical Testing:
  - Steps Used for Various Testing Processes
  - Proper Selection and Use of Test Meters
  - Utilizing the Results of Testing Procedures

- Specialty Systems:
  - Fire Alarms
  - Security Systems

- CALCTP:
  - Advanced Lighting Control Systems
  - Lighting Control Strategies
  - Line Voltage Switching Controls
  - Low Voltage Switching Control
  - Dimming Controls
  - Occupancy Sensors
  - Photosensors

- Electric Vehicle Infrastructure Training Program

0-10 **OSHA 10 (OSHA CERTIFIED INSTRUCTOR)**

Safety training cannot exceed 10% of total training hours per trainee. This cap does not apply to OSHA 10/30 training.

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