



**Training Proposal for:
Penguin Computing, Inc.**

Small Business ≤ \$50,000

ET16-0168

Approval Date: August 31, 2015

ETP Regional Office: San Francisco Bay Area

Analyst: R. Jackson

CONTRACTOR

- Type of Industry: Manufacturing
Technology/IT
Priority Industry: Yes No
- Number of Full-Time Employees
California: 84
Worldwide: 106
Number to be trained: 84
Owner Yes No
- Out-of-State Competition: NAICS Code Eligible
- Special Employment Training (SET): Yes No
- High Unemployment Area (HUA): Yes No
- Turnover Rate: 12%
- Repeat Contractor: Yes No

FUNDING

- Requested Amount: \$34,944
- In-Kind Contribution: \$39,340

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 Priority Rate SB <100	Business Skills, Computer Skills, Continuous Improvement, Manufacturing Skills	84	8-60	0	\$416	\$16.44
				Weighted Avg: 16			

- Reimbursement Rate: Job #1: \$26 SB Priority
- County(ies): Alameda, San Francisco
- Occupations to be Trained: Administrative Staff, Finance Staff, CEO, CFO, CTO, Director, Engineers, Production Staff, Technical Staff, Managers, Supervisor, Product Engineer, Product Managers, Project Program Managers, Leads, Sales/Marketing Staff, Technical Support Staff, VP, IT
- Union Representation: Yes
 No
- Health Benefits: Job #1: \$2.33 per hour

SUBCONTRACTORS

- Development Services: CTA in San Jose assisted with application development for a flat fee of \$2,500.
- Administrative Services: CTA will also perform administrative services in connection with this proposal for a fee not to exceed 13% of amount earned.
- Training Vendors: To Be Determined

OVERVIEW

Penguin Computing, Inc. (Penguin), founded in 1998 in San Francisco, provides customized High Performance Linux-based Computing (HPC) solutions. Penguin’s products range from Linux servers and workstations, integrated turn-key HPC clusters, and cluster management software. A cluster is a group of machines interconnected in a way to work together as a single system resulting in faster computational strength. Penguin also customizes build-to-order server solutions. Penguin recently became an Original Equipment Manufacturer. This means that in addition to the assembly work traditionally performed at Penguin, the Company is now designing and manufacturing products in-house. San Francisco and Fremont staff will participate in training.

Penguin has installed over 18,000 systems within the academic, government, life sciences, manufacturing, financial services, and web hosting industries, in over 40 countries. Some of its customers include AOL, NASA, Caterpillar, Lockheed Martin, Boeing, Life Technologies and the US Navy.

Penguins' prior training project trained 42 employees and was completed in June 2015. The prior training project was primarily a skill enhancement program designed to keep the Company competitive in California with highly skilled technical employees. This new training proposal further supports needed training related to the recent expansion of the Company, making it an Original Equipment Manufacturer. Also, many technological upgrades and new employees prompt additional training needs as new products are being designed and delivered.

Penguin is eligible for ETP funding as a qualified priority industry.

Training Plan

The goal of the training project is to improve employee skills, increase productivity, enhance efficiency, provide skills related to new fabrication tasks, implement stronger quality controls, and boost sales. Penguin reports a near 30% growth in its employee base in the last two years. Although eligible, the Company chose not to include Job Creation elements in the prior Agreement or current proposal. The decision to not request a Job Creation Job Number was based on the perceived administrative ease to keep the population in one Job number and a lack of any need for a lower wage which is typically allowed for Job Creation populations. Penguin is currently in a strong investment mode to meet the rollout of new products scheduled to hit markets in 2016. Thus, Penguin's emphasis on upgrading skills to keep pace with rapid technological changes and new developments driven by consumer demands is reflected in the proposed curriculum.

This will be Penguin's second ETP Agreement. Of the 84 trainees, 42 are receiving training for the first time. The remaining repeat trainee population will be receiving training in topics they have not previously been trained on under the prior ETP agreement. Topics repeated from the prior agreement will only be attended by new employees or employees that have not attended before. Training is set to begin upon Panel approval.

Class Lab training will be delivered by subject matter experts in-house. E-learning will be provided by vendors based in CA, or otherwise approved in advance as required by ETP. Vendors are still to be determined.

Business Skills: Training will be offered to all trainees to increase familiarity with company products, improve customer service and manage projects more efficiently. Additionally, skills to coach others, deliver professional presentations, and manage projects within their work areas have been deemed necessary by Penguin.

Computer Skills: Training will be offered to Engineers, Leads, Managers, Supervisors, IT Staff, Sales/Marketing and Support Staff. A new ERP system (NetSuits) and a new finance system (Adaptive Insights) was recently installed. The ERP system will help track production schedules and improve delivery times. The new finance system will help the Company better respond to Auditing requirements related to government contracting and other customer demands for improved quality. Any of the repeated topics listed in this project remain in the curriculum as result of updates made to software which required further training. The more sophisticated topics listed in the curriculum will be delivered to Engineers and are related to building skills to enable the engineers to support software applications and related updates.

Manufacturing Skills: Training will be offered to Production Staff, Technicians, Engineers, Leads, Supervisors and Managers. New manufacturing and fabrication procedures for new products such as Relion Servers, Linus Workstations and Artica network switches require technical skill upgrades to reduce production costs. Production workers will be cross trained to manage multiple manufacturing (assembly and fabrication) functions. Technicians will be trained to install and maintain Scyld products at the customer's site. The training is new to these employees and will include; concepts and functionality of Scyld ClusterWare software, essential configuration and administration of the Scyld environment, fundamentals of creating and executing cluster-aware software applications, how to use Scyld-specific commands and system monitoring applications and customization and control of the Scyld environment using Scyld utilities and environment variables. Supervisors and Managers who work on the manufacturing floor also need to know all new product and processes in order to help train less experienced employees in all aspects of installation, maintenance and product updates. Lastly, materials management (shipping/receiving) and forklift training will be provided to production staff.

Continuous Improvement: Training will be offered to all employees. Lean Manufacturing skills and its related components (Six Sigma) will lead to reduced costs, improved efficiency, and increased productivity. Leadership and coaching skills will help Leads and Managers attain strategic goals. Transitioning to an Original Equipment Manufacturer requires adding quality metrics to satisfy customers. As a result of rapid product expansions Penguin hired a Quality Engineer and created a number of new quality control processes. Consequently, the majority of the production related classifications must now undergo training to implement the new processes as a part of Penguins continuous improvement strategy.

RECOMMENDATION

Staff recommends approval of this proposal.

PRIOR PROJECTS

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

Agreement No.	Location (City)	Term	Approved Amount	Payment Earned \$ %
ET13-0385	Fremont	06/03/13 – 06/02/15	\$44,200	\$35,719 (81%)

Exhibit B: Menu Curriculum**Class/Lab**
e-Learning Hours

8 - 60

Trainees will receive any of the following:

BUSINESS SKILLS

- Global Marketing & Communications
- New Product Knowledge and updates
- OCP – Open Compute Project product training
- RAID – Redundant Array of Independent Disks technology training
- Sales Order Process
- High Speed Networks
- Penguin Server Pre-Sales-
- Presentation & Writing Skills (Technical/Non-Technical)
- Product Management Process
- Sales & Negotiating
- Software-Defined Networking Pre-Sales New product
- Storage Architecture Pre-sales
- Vendor Product Updates

COMPUTER SKILLS

- Order Management Systems
- Ceph Product updates
- Cluster Technology
- Cisco Certified Networking CCNA
- CompA+ Hardware training
- Embedded Firmware Updates
- ERP (Electronic Resource Planning System)
- Financial Planning / Forecasting tools (Adaptive Insights)
- Hardware Troubleshooting / Hardware Modeling
- Linux System & Tools
- Lustre Software
- Microsoft Tools (Intermediate / Advanced only)
- NetSuite
- Network+ - networks training
- New Product Design / Development
- Nvidia Graphics Card
- Penguin Products and New Updates
- Programming Languages / Software Tools
- Project Management Software Tools
- RedHat Tools / RedHat Certification
- Salesforce
- Vendor Software Updates

CONTINUOUS IMPROVEMENT

- Customer Service Techniques
- Effective Meetings

- Graphics Processing Unit (GPU)
- High Performance Work Teams
- Manufacturing Quality Practices
- OEM Manufacturing Techniques
- Organizing & Prioritizing
- Productivity Improvement
- Quality / Process Improvement & Audit
- SPC / Lean / Process Improvements
- Leadership Skills
- Coaching Skills
- Working Smarter / Workflow
- Workplace Communications

MANUFACTURING SKILLS

- Assembly – Servers, Racks,
- Cross Training
- Design (Server, Networking, Storage products)
- Document Control System
- Fabrication Techniques
- GPU (graphics processing unit)
- Hardware Training (CPU, Memory, Power Supply, Motherboard)
- Installing / Servicing Equipment
- Machinery Certification
- Maintenance of Equipment
- Manufacturing Computer System
- Material Handling / Storage
- New Build Instructions / Process Changes
- New Equipment Knowledge / Certification
- OEM Manufacturing techniques
- Onsite Troubleshooting / Reliability / Inspection
- Operating Production Equipment
- Power Vehicle Training (forklift)
- Prototyping
- Repair / Refurbishing / Testing of Electronic Assemblies
- Shipping / Receiving Processes
- Warehouse / Material Mgt.

Note: Reimbursement for retraining is capped at 60 total hours per-trainee, regardless of method of delivery.