



**Training Proposal for:
Agilent Technologies, Inc.
Agreement Number: ET12-0215**

Panel Meeting of: **January 27, 2012**

ETP Regional Office: **San Francisco Bay Area**

Analyst: D. Woodside

PROJECT PROFILE

Contract Attributes: Priority Retrainee
 Industry Sector(s): Manufacturing Biotechnology/Life Sciences

Counties Served: Santa Clara and Sonoma
 Repeat Contractor: Yes No

Union(s): Yes No
 Priority Industry: Yes No

No. of Employees in CA: 3,000
 No. of Employees Worldwide: 18,500

Turnover Rate %	Manager/Supervisor %
11%	20%

FUNDING DETAIL

Program Costs	Substantial Contribution	Total ETP Funding	In-Kind Contribution
\$499,608	\$0	\$499,608	\$1,040,652

TRAINING PLAN TABLE

Job No.	Job Description (by Contract Type)	Type of Training	Estimated No. of Trainees	Range of Hours		Average Cost per Trainee	Post-Retention Wage
				Class / Lab	CBT		
1	Priority Retrainee	Advanced Technology, Business Skills, Computer Skills, Continuous Improvement, Manufacturing Skills	771	24-200	0-100	\$648	\$15.70
				Weighted Avg: 36			

Minimum Hourly Wage by County: \$15.70 per hour for Santa Clara County; and \$14.39 per hour for Sonoma County.

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

Wage Range by Occupation	
Occupation Title	Wage Range
Technician	
Engineer	
Engineering Manager	
Information Technology Staff	
Administrative Staff	
Manager/Supervisor	

INTRODUCTION

In this proposal, Agilent Technologies, Inc. (Agilent) seeks funding for retraining as outlined below:

Headquartered in Santa Clara, Agilent manufactures products that sense, analyze, display, and communicate data for use in the life sciences, chemical analysis, communications and electronics industries. These products include oscilloscopes, chromatographs, spectrometers, signal sources, signal and network analyzers, atomic force microscopes and nuclear magnetic resonance spectrometers amongst other technical specialties. Agilent was spun-off from Hewlett-Packard Company in 1999 as part of a corporate realignment that created two separate companies. Agilent employs 3,000 workers in California where its primary research, development, and manufacturing sites are located. Agilent is proposing to retrain front-line workers at its manufacturing facilities in Santa Clara, Santa Rosa, and Rohnert Park.

The company is eligible for ETP funding under Title 22, California Code of Regulations, Section 4416(i) as a manufacturer. The company also qualifies as a priority industry on this basis.

Agilent Technologies has three main businesses: 1) the electronic measurement business manufactures electronic measurement instruments and systems, software design tools, and related services that are used in the development, manufacture, deployment, and operation of electronics equipment; 2) the chemical analysis business provides application-focused solutions that include instruments, software, consumables and services that enable customers to identify, quantify and analyze the chemical properties of substances; and, 3) the life sciences business provides instruments, software, consumables and services that enable customers to identify, quantify, and analyze the physical and biological properties of substances. Agilent representatives report that the company has invested heavily in research and development through its centralized, internal research laboratory resulting in the creation of an extensive pipeline of new products for all three business segments.

Company representatives state that development and manufacturing of its products is a highly exacting and complex process that demands a heavy emphasis on quality and reliability since customers use the measurement results to develop their own products. To be successful, the company must have an experienced, well-trained workforce that can understand and follow specific quality protocols and manufacturing procedures, while at the same time work efficiently and contribute to the high quality and reliability standards required by Agilent's customers.

PROJECT DETAILS

Under this proposal, Agilent will provide training to expand employee skills to work with new technology, to adapt to changing business requirements, and to improve productivity. Each trainee will receive between 24 - 200 classroom/laboratory and CBT hours in the types of training outlined below:

Computer Skills training will primarily be provided to Information Technology, Engineers, Engineering Managers and Technicians because Agilent is implementing new mission critical computer systems to support increased manufacturing reliability and product sophistication. Training will be delivered on a variety of corporate systems ranging from network programming languages and visual basic applications to its in-house business computer applications for inventory, account management, and manufacturing control. Training will also cover the implementation of an advanced customer relationship management system that will serve as a "real-time" case management system for field customer service engineers.

Continuous Improvement Skills for employees across all occupations will address the complexity of Agilent's new measurement technology which puts increasing pressure to improve product design cycles, manage product life cycles, reduce factory ramp time, and increase factory utilization. This training will improve the company's service, quality, reliability, delivery time, and order accuracy by providing a common language and a consistent methodology for how employees meet customer requirements. Agilent will also provide leadership and coaching skills to frontline supervisors and team leaders to enhance team-building and create individual development plans for several job categories. At the same time, both leaders and frontline workers will be trained in statistical analysis, problem-solving tools, process improvement techniques, and corrective action methods.

Business Skills training for Administrative Staff, Engineers, and Manager/Supervisors is necessary for those employees who currently lack the ability to successfully introduce new products. Coursework will include technical writing, how to manage projects, marketing, communications, finance, and preparing effective oral and written presentations to customers.

Trainees will also learn more detailed technical information about the company's products to better understand the technical needs of Agilent's customers. Project management training will allow trainees to complete complex projects efficiently while maintaining quality. International quality regulations, including the complexity of Agilent's products and business transactions, requires advanced customer service and sales skills training to create a new culture of increased customer satisfaction. Product knowledge and marketing techniques training will also be delivered to select employees to better market the company's advanced measurement instruments to its growing global customer base.

Manufacturing Skills for Technicians, Engineers and Manager/Supervisors will cover the latest mechanized procedures involving new equipment, tools, and techniques. Production workers will learn how to reduce costs, how to become more effective in their jobs, how to find root causes of problems and many other tools in running an efficient manufacturing operation. This training will also enable manufacturing employees to learn cross functional production skills on several different pieces of equipment and manufacturing assembly techniques. Manufacturing skills training will be taught by a combination of highly skilled internal production supervisors, technicians, and/or engineers. Agilent must also ensure that its manufacturing employees are cross-trained on allied production line equipment and competencies to meet global productivity and quality standards.

Advanced Technology (AT) training will be delivered to Engineers, Technicians, and Engineering Managers in Agilent's own proprietary biotechnology, bio-analytical and electronic measurement methods including: inorganic spectroscopy, organic spectroscopy, particle separations, life sciences, and nano-technology tools and techniques. Company representatives state that after several years of building up its presence in the life-science segment with technology advancements in measurement technologies, Agilent now needs to create "a long-term sustainable model" for the business which requires a highly skilled workforce. AT courses will focus on four technologies: proteomics, DNA micro-arrays, informatics, and diagnostics. Training costs in these disciplines is estimated at over \$9,600 per day of training. Trainees slated to receive training have previous training and experience in biotechnology and/or electronic technology measurement but lack specific skills in the company's product technologies. The trainer to trainee ratio will be capped at 10 trainees to one instructor to allow in-depth coverage and personal attention from the instructor. Because of the highly technical nature of the training, sophisticated equipment, and costliness of the training, staff recommends that Agilent receive the fixed-fee hourly rate of \$26 for this training.

Commitment to Training

Agilent represents that ETP funds will not displace the existing financial commitment to training as described in this proposal. In fact, the company reports that it expects to invest approximately over \$2 million in training for 2011 in California. Thus, the opportunity for enhanced training made possible by ETP funds will encourage an ongoing financial commitment in workforce training. Agilent provides ongoing training including: basic job skills, new employee orientation, anti-harassment, on-the-job training, personal development skills, behavioral interviewing skills, and introductory and intermediate computer skills. In addition, Agilent provides highly technical skills to its engineering and information technology staff via industry and technical conferences. The aforementioned training will continue during the term of the proposed ETP Agreement at Agilent's own expense. Agilent represents that safety training is, and will continue to be, provided in accordance with all pertinent requirements under state and federal law.

Substantial Contribution

No substantial contribution will be imposed because none of the three participating Agilent facilities in the previous ETP Agreement earned over \$250,000 for the training of its workers.

RECOMMENDATION

For the reasons set forth above, staff recommends approval of this proposal.

PRIOR PROJECTS

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

Agreement No.	Location (City)	Term	Approved Amount	Payment Earned
ET06-0289	Santa Clara, Santa Rosa, and Rohnert Park	02/06/2006-02/05/2008	\$1,473,000	\$256,641(17%)

Agilent earned 17% of the Agreement amount on its previous ETP Agreement. The low performance was attributed by company representatives to several factors including: 1) the economic downturn which began during the term of the agreement and which required Agilent to cut back on workforce training to its front-line employees; 2) the utilization of on-line training methodologies instead of live, instructor-led courses that proved to be a faster and less expensive way to train workers but was reimbursed at a much lower rate by ETP; and 3) the implementation of an enterprise-wide learning management system (LMS) that increased the complexity of training tracking and was problematic in meeting ETP reporting requirements. The company reports that over 64,000 hours of ETP eligible training was delivered during the term of the previous ETP Agreement but much of it was not tracked in the LMS.

Company representatives report that Agilent has emerged from the global economic downturn in a position of strength - \$5 billion in sales in 2010, and is optimistic about future business. The company representatives also report that the LMS, called Mzinga, has been successfully implemented across all business segments and now meets ETP requirements. Based on a training needs analysis, Agilent plans to deliver over 63,000 hours of workforce training during the next two year period to its California workforce far exceeding this request for ETP funding. For these reasons and because (1) Agilent is a Priority Industry Life Sciences Manufacturer, (2) has provided a training roll-out plan, (3) completed installation of its LMS, and (4) has the commitment from and support of company management for the proposed ETP training, ETP staff recommends the funding at the proposed amount even though it exceeds the amount earned under ET06-0289.

DEVELOPMENT SERVICES

Herrera & Company, of Stockton, provided application development services at no cost to Agilent.

ADMINISTRATIVE SERVICES

Agilent has retained Herrera & Company to perform administrative services in connection with this proposal for an amount not to exceed 13% of payment earned.

TRAINING VENDORS

Outside vendors will be identified for ETP record-keeping purposes as they are retained by the company.

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

24-200

Trainees may receive any of the following:

ADVANCED TECHNOLOGY SKILLS

System data modeling and architecture
Advanced instrument programming development
Application engineering services
Factory automation tools and techniques
Instrument modeling/integration software development
Measurement sciences practice and theory
Multipart machine automation development

CONTINUOUS IMPROVEMENT SKILLS

Product quality and reliability
Six Sigma
Failure modes and effects analysis
Process improvement training
Problem solving tools and techniques

Leadership/Coaching Skills

Effective teams
Efficiency workflow
Facilitation skills and mentorship
Risk analysis and strategic planning
Strategic sales negotiation techniques

BUSINESS SKILLS

Technical presentations
Customer communications and awareness
Market validation and decision modeling
Sales and negotiation skills
Finance and accounting skills

COMPUTER SKILLS

Management and manufacturing control systems
Network infrastructure, security, and firewall development
Materials and logistics software development
Advanced desktop applications
Information technology (IT) solutions internet tools
Programming languages
Project management software tools

MANUFACTURING SKILLS

Production and equipment operations
Lean manufacturing
Process capability mapping
Manufacturing process cross training
Machine operations, calibration, and maintenance

Manufacturing assembly standards and procedures

CBT Hours

0-100

COMPUTER SKILLS (1 to 8 hours per module)

Advanced desktop applications
ERP system training and reporting
Project management software tools

CONTINUOUS IMPROVEMENT (1 to 8 hours per module)

Product quality and reliability
Quality fundamentals/core skills
Process improvement training
Problem solving tools and techniques

Leadership/Coaching Skills

Effective teams
Facilitation skills and mentorship
Leading the global workforce

BUSINESS SKILLS (1 to 8 hours per module)

Technical presentations
Customer communications and awareness
Market validation and decision modeling
Sales and negotiation skills
Finance and accounting skills
Marketing promotion and position

*An excel list will be provided to ETP with titles and standard times per module. The list includes codes which will correspond to the CBT topics listed above.

Note: Reimbursement for training is capped at 200 total training hours per trainee regardless of delivery method. CBT will be capped at 50% of total training hours per trainee.