Training Proposal for:
Renesas Electronics America Inc.
Agreement Number: ET11-0134

Panel Meeting of: December 8, 2010
ETP Regional Office: San Francisco Bay Area  Analyst: T. Teles

PROJECT PROFILE

Contract Type: Priority/Retraine Single Industry Sector(s): Manufacturing

Counties Served: Santa Clara Repeat Contractor: ☐ Yes ☒ No
Union(s): ☐ Yes ☒ No Repeat Contractor: ☐ Yes ☒ No
Priority Industry: ☒ Yes ☐ No

No. Employees in CA: 900 No. Employees Worldwide: 25,000

<table>
<thead>
<tr>
<th>Turnover Rate</th>
<th>Manager/ Supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>4%</td>
<td>16%</td>
</tr>
</tbody>
</table>

FUNDING DETAIL

<table>
<thead>
<tr>
<th>Program Costs</th>
<th>Substantial Contribution</th>
<th>Total ETP Funding</th>
<th>In-Kind Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>$169,200</td>
<td>$0</td>
<td>$169,200</td>
<td>$276,019</td>
</tr>
</tbody>
</table>
TRAINING PLAN TABLE

<table>
<thead>
<tr>
<th>Job No.</th>
<th>Job Description (by Contract Type)</th>
<th>Type of Training</th>
<th>Estimated No. of Trainees</th>
<th>Range of Hours</th>
<th>Average Cost per Trainee</th>
<th>Post-Retention Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Priority/Retrainee</td>
<td>Advanced Technology, Business Skills, Computer Skills, Continuous Improvement</td>
<td>200</td>
<td>24-200 0-100</td>
<td>$846</td>
<td>$14.87</td>
</tr>
</tbody>
</table>

Minimum Wage by County: $14.87 per hour in Santa Clara 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

Although employer provides health benefits, they are not being used to meet Post-Retention Wage.

Wage Range by Occupation

<table>
<thead>
<tr>
<th>Occupation Title</th>
<th>Wage Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration/Business/Finance Staff</td>
<td></td>
</tr>
<tr>
<td>Engineer, Project Manager, Technical Sales-Marketing</td>
<td></td>
</tr>
<tr>
<td>Production Staff, Technician</td>
<td></td>
</tr>
<tr>
<td>Director-Technical/Administration</td>
<td></td>
</tr>
<tr>
<td>Manager, Supervisor</td>
<td></td>
</tr>
</tbody>
</table>

INTRODUCTION

In this proposal, Renesas Electronics America Inc., (Renesas) seeks funding for retraining as outlined below:

Renesas was formed by a merger in April 2010, between Renesas Technology Corporation and NEC Electronics Corporation. The company is a supplier of advanced semiconductor solutions including microcontrollers, SoC (system on chip) solutions, and a broad range of analog and power devices, displays, as well as LCD modules. Renesas has 900 employees in California at its headquarters in Santa Clara and at a manufacturing plant in Roseville. Training will be conducted in Santa Clara.

According to Renesas representatives, the company has a specialty focus on the mobile, digital consumer, and automotive applications. In the mobile market, the company offers application processors to support the increased demand for multimedia compatibility in mobile phones as well as many other solutions required for mobile needs. In the digital consumer products market, (flat-panel display, digital video camera, DVD player recorder, digital still camera) the company provides advanced system, device, and element technology. In the automotive market, the company is working toward improving safety, reliability, and comfort.
The company qualifies for priority ETP funding as a manufacturing company in a priority industry under Title 22, California Code of Regulations (CCR), Section 4416(i).

**PROJECT DETAILS**

A primary aim of Renesas is to ensure that customers have easy, rapid access to the complete system solutions they need. This includes chips, hardware/software tools, application assistance, and manufacturing. Further, electronics have fundamentally changed the world and how people interact. To create the latest innovations and bring new products to market, Renesas employees must remain knowledgeable in their fields of expertise while mastering new concepts and products. The continued success of the company depends on meeting time-to-market demands with new design technologies.

There are three main events which require the training of 200 employees in advance technology, business skills, computer skills, and continuous improvement skills.

**Merging two companies:** The recent merger established a new company which needs to implement a common quality program, merge products and technologies, and provide cross-training on computer systems and tools.

**Integrate Software Systems (NorthStar & SAP):** The new company must merge two Software Management Systems NorthStar & SAP into a common tool set to increase capability, flexibility, and performance. Implementing this new SMS environment will require several changes to the current software and hardware tools.

**Green Energy Initiative:** Introduction of environmental awareness is driving the chip design in an eco-friendly direction including lead-free, RoHS packaging, promotion of energy saving initiatives, reduction of waste (reduce, reuse, recycle); and using green cleaning solutions.

Training will be conducted in the following:

**Continuous Improvement** – This training will allow the formation of teams that will include representatives from different organizational units. The teams will become multi-skilled, and monitor quality throughout the organization. Leadership and coaching program will assist in the merging process and provide a common leadership philosophy across the company. Retaining current workforce will enable the company to keep a top talent-pool within Renesas.

**Business Skills** – employees require training to continue to serve the customer, to provide product updates, and to adapt to market changes. Renesas needs to delegate responsibility to technical employees and professionals for the customer service side of the business. The training will provide sales engineers, design engineers, analysts, program managers and other customer support staff with the necessary skills to support and communicate with customers and peers.

**Computer Skills** – this training will focus on design applications for sales engineers as well as training all technical workers in all aspects of hardware/software tools. Currently, employees use a wide range of computer tools for designing custom applications. In order to streamline processes, it is necessary that all employees use the same computer tools.

**Advanced Technology (AT):** The major focus of this training will be to provide new and advanced skills that have not been available to employees in the past. The AT skills will enable technical employees to use the tools required to customize hardware and software for the
creation of future products. Senior management identifies markets and employees must maintain technical skills to create innovative software/hardware solutions.

**AT Rate**

Renesas management has identified three areas of AT training: Support technologies, design technologies, and NorthStar and SAP systems. Training for support technologies is needed to improve internal hardware and software systems used to manage both business processes and customer support processes. This will involve training IT staff as well as other key users. Training in design technologies will provide updated skills to engineer and technical staff on embedded systems in MCU and MPU Products. Training in NorthStar and SAP Systems will train key users and engineers in system maintenance, programming, customization, and maintaining data.

The training hours required to conduct cross-training on the Northstar and SAP systems can reach up to 200 hours for key users and engineers. These individuals will then provide training to other employees. The training for AT skills will be more expensive than the general training courses and includes additional training-related costs – hardware, software and special training materials. The equipment and computers used in the training are very advanced and extremely technical. The cost of a 40-hour AT course by various vendors will be between $1,200 and $2,500. These costs are well above the $18.00 reimbursement for regular training. The trainer-to-trainee ratio is 1:10 for AT, to allow in-depth coverage and personal attention from the instructor.

**Commitment to Training**

Renesas provides substantial training resources to ensure employees have basic skills to do their job. The current annual training budget for California non-ETP related training is estimated to be $60,000. Company’s ongoing training efforts include courses in new-hire training and orientation, compliance training, tuition reimbursement, degree programs, health and safety, basic computer skills, and special training requests.

Renesas represents that ETP funds will not displace the existing financial commitment to training. Indeed, Renesas anticipates that the opportunity for enhanced training made possible by ETP funds will encourage an ongoing financial commitment in this area.

Renesas represents that safety training is, and will continue to be, provided in accordance with all pertinent requirements under state and federal law.

**Temporary to Permanent Hiring**

Renesas estimates that one to 15 trainees in Job Number 1 come under Panel guidelines for “temporary to permanent” employment. The company has retained these employees through a temporary agency, with the intention of hiring them into full-time, permanent positions after training.

These trainees must be determined eligible to participate in ETP-funded training before the start of training, while on payroll with the temporary agency. (Unemployment Insurance Code Section 10201(c).) However, the retention and post-retention wage requirements cannot be satisfied until after they have been hired by the company. Until then, the company will not receive progress payments.
**RECOMMENDATION**

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

**DEVELOPMENT SERVICES**

The company retained California Training Administration (CTA) in San Jose to assist with development of this proposal for a flat fee of $3,500.

**ADMINISTRATIVE SERVICES**

The company also retained CTA to perform administrative services in connection with this proposal for a fee to be determined, but not to exceed 13% of payment earned.

**TRAINING VENDORS**

To Be Determined
Exhibit B: Menu Curriculum

Class Lab Hours
(24 - 200 Hours)

Trainees will receive any of the following:

ADANCED TECHNOLOGY (1:10 ratio)

SUPPORT TECHNOLOGIES
- Application Engineer Training
- Simulation Techniques
- RENESAS Processor & Support Tools
- Testing/Debugging Techniques
- Design Management
- Web Services & Design
- Engineering Tools
- Windows Server
- IIS (Web Server)
- Custom Layout Tools
- Virtual Lab Products
- Exchange Server (email)
- Project Management Software Tools
- Interactive Online Support Tools
- Software Architecture
- Microsoft Certification Training (MCT)

DESIGN TECHNOLOGIES
- Designer Workflow Process
- Programming Language Skills
- System in Package Technology (SIP)
- Designing for Nanometer Products
- Electrical/Design Engineering
- Hardware Modeling
- Software Design Techniques
- Developer Workflow Process
- User Interface Best Practices
- User Research Methods

NORTHSTAR & SAP SYSTEMS (Software Systems)
- Programming
- System Configuration
- Customization
- Strategic Planning
- Data Management
- Queries/Operations
- Navigation
- Generating Custom Reports
- Material Management
- Managing Customer Data
COMPUTER SKILLS  (1:20 ratio)
- Computer Programming & Languages
- Using NorthStar System
- Using SAP Budget System
- Creating Park Docs and Purchase Requisitions in SAP
- IP Awareness (Intellectual Property)
- IT Solutions (Information Technology)
- Layout Design
- MicroProcessor/Microcontroller Technology
- Web Interface
- Document Control System
- Database Tools
- Wireless Technology
- Microsoft Tools (Intermediate and Advanced)

BUSINESS SKILLS  (1:20 ratio)
- Solution Selling
- Sales & Negotiations
- RENESAS Partner/Product Training
- Managing Projects Online
- Technical Presentation Skills
- Technical Business Writing
- Global Marketing
- Optimizing Customer Value
- Strategy Implementation/Strategic Planning
- Trade Processes/DevCon Updates
- Material Management/Supply Chain

CONTINUOUS IMPROVEMENT  (1:20 ratio)
- Customer Satisfaction
- High Impact Meetings
- Matrix/Risk/Flow Management
- Project/Program Quality Management Concepts
- Quality Design/Improvements
- Working Smart /Working w/Others
- Leadership/Coaching Skills
- Effective Communications/Delegating/Listening
- Team Building / Problem Solving
- Excellent Decision Making
- How Motivate Employees & Peers
- Identifying Problems/Presenting Solutions
- Maximizing Productivity/Setting Priorities
- Green Energy (RoHS, Recycling, Waste, Lead-free)
CBT Hours
(0-100 Hours) Trainees will receive any of the following:

COMPUTER SKILLS (CBT)
- C for Embedded Systems Part 1 8 hrs
- C for Embedded Systems Part 2 8 hrs
- CAN (Control Area Network) 8 hrs
- Implementing CANopen 8 hrs
- Motor Control Using PWM 8 hrs
- Embedded Internetworking 8 hrs
- Microcontroller Architecture 8 hrs
- Canopen 1A-XA Hand-on 8 hrs
- Generic Issues with Embedded Designs 8 hrs
- Upgrading form 8/16 bit to 32 bit ARM 8 hrs
- Introduction to the Embedded Marketplace 8 hrs
- Shorten Time to Market 8 hrs
- Embedded Systems and Software 8 hrs
- Real Time Operating System 8 hrs

CONTINUOUS IMPROVEMENT (CBT)
- Certification Global Process 0.5 hrs

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