

# Workforce Innovations for a New Nevada - NSHE Capacity Program Application

The Workforce Innovations for a New Nevada (WINN) Fund was established to provide programs of workforce recruitment, assessment or training to the benefit of new or expanding companies in Nevada.

This application is to be completed by a representative of an Authorized Provider per NRS 231.1415 who wishes to provide a workforce training program with WINN funding. A separate application is necessary for each training program. Applications requesting funding in excess of \$100,000 must be reviewed and approved by the Board.

On December 2, 2021, GOED's Board approved minimum wage thresholds for WINN Fund investments. Jobs supported by the training program in this proposal must pay at least \$17 per hour; additional requirements apply and supplemental information may be requested to complete the application process.

# **Authorized Provider Information**

#### Institution Name

Truckee Meadows Community College

#### Address

7000 Dandini Blvd., Reno, Nevada 89512

#### Workforce Development Program Experience

TMCC is Northern Nevada's jobs college, preparing qualified students for jobs in industries here in Nevada. We provide workforce training for priority sectors in advanced manufacturing, air conditioning, refrigeration, welding, machining and auto/diesel. 95% of our students stay in Nevada after completion of their programs and build and support our local community. TMCC students, graduates and employees put more than \$678 million dollars into our region's economy.

TMCC has a demonstrated history of executing successful workforce development programs in career technical fields. We provide training for entry level employees seeking good living wage jobs with upward career mobility. We provide apprenticeship training for the trades, as well as , non-union employers with registered apprenticeship programs. We also provide opportunities for incumbent workers to return for upskilling, scaffolding upon previous credentials earned. We offer over 160 degrees & certificates in over 70 areas of study. In the manufacturing department students can earn short-term skills certificates in CNC Milling, CNC Turning, Industrial 4.0 Fundamentals and Applications, Industrial Communications and Data Analytics, Industrial Maintenance for Automation, Industrial Mechatronics, Industrial Process and Maintenance Theory, and Industrial programming and Controls, a Certificate of Achievement in CNC Machining, Advanced Manufacturing and Automation, Fundamentals of Smart Automation, an AAS Degree in Automation and Robotics and a Machining, Manufacturing Technologies AAS Degree. In the spring of

2024 alone TMCC issued 12 AAS degrees in machining and manufacturing, 12 certificates of achievement and 61 skills certificates. Students can also earn industry recognized NC3 certificates and SACA certificates aligned with these courses and programs.

TMCC has well-established advanced manufacturing and machining advisory boards. We rely heavily upon advisory board input to create, redesign and refine our workforce training programs. Business partners include: Hamilton, Panasonic Energy of North America (PENA), Tesla, Gyford Decor, Sierra Nevada Corporation, Advanced Precision, Inc., Dragonfly, Redwood Materials, New Millennium, Legacy CNC, U.S. Ordnance, Stratamet, Vineburg Machining, and Samco Fabrication among others. We also work closely with our local workforce development agencies including NevadaWorks, EDAWN, Manufacture Nevada, DETR, and EmployNV.

TMCC has a proven track record of managing workforce initiatives & grants including WINN awards, TAACCCT grants, the American Apprenticeship Initiative, DOL Grants, GCCAP Grant for apprentices, an NSF ATE Grant, the SANDI grant, Nevada Dept. of Education Carl D. Perkins grants, and several private donor workforce grants as well. We have established methods of tracking and documenting grant-related expenses, including required signatures of supervisors and grant PIs in the procurement process to ensure expenditures are reasonable and allowable. TMCC has an institutional research office that can conduct research queries and provide data for grant reporting. They have also created numerous data dashboards for employee use. The grants office tracks the reporting due dates for all grants and the PIs responsible submit them in a timely manner.

Primary applicants must be able to effectively track and document expenses related to this grant, procure equipment in a timely fashion, maintain procedures and internal controls for accounting, and have infrastructure for maintaining data and completing reports.

#### **Organizational Capacity**

TMCC's FY 24-25 budget is over 50 million dollars. TMCC's Foundation and Grants Office currently manages nearly 29 million dollars in federal, private, and state pass-through grant funding. Over the past 50 years, TMCC has successfully managed grants from the US Department of Education, Labor, Health and Human Services, State of Nevada Department of Education and Health & Human Services, and nationally and locally based corporate and non-profit donor funding. TMCC adheres to all federal grants management policies in 2 CFR Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.

Additionally, TMCC is governed by the Nevada System of Higher Education (NSHE) and its Board of Regents. TMCC adheres to all NSHE student information and human resources policies and procedures related to accounting and procurement. NSHE utilizes Workday for budgeting and financial accounting, facilitating easier financial data collection allowing for effective project management across institutions.

Post Award grant management (a division of TMCC's foundation and grants) is responsible for grant compliance and works closely with TMCC Controllers Office, which is responsible for establishing sponsored accounts, financial reporting and fiscal compliance. The Deans and other principal investigators meet monthly with the Post Award team to ensure projects stay on track, discuss any issues that have emerged and to monitor expenditures. In the Technical Sciences Division, a new Project Director has been hired to assist the Dean with oversight of these grant funded work plans, activities and outcomes.

# **Project Information**

#### **Project Name**

TMCC Lithium Loop Manufacturing Apprenticeship Program

#### **Primary Economic Sector**

Advanced & General Manufacturing

Project Point of Contact Kim Harrell

Phone (775) 856-5307

### **Employer Partner(s)**

#### **Company 1**

Company Name Tesla

Company Point of Contact Ricky Baeza E-mail rbaeza@tesla.com

Job Titles to Be Filled Operators Number of Job Openings to be Assisted 300

Number of Job Openings to be

Average Hourly Wage for Job Hires \$21.00

Employer Commitment & Support Letter Tesla\_WARN\_Notice\_-05-03-2024.pdf

LOS TMCC MDP expansion[22] (1).pdf

Todd.Thurston@us.panasonic.com

Workforce Disruption - Prior 12 Months Yes

### **Company 2**

**Company Name** Panasonic Energy of North America (PENA)

**Company Point of Contact** Todd Thurston

Job Titles to Be Filled Operators

Average Hourly Wage for Job Hires \$22.00

Workforce Disruption - Prior 12 Months No

### **Company 3**

Company Name Hamilton

**Company Point of Contact** 

E-mail

E-mail

Assisted 24

**Employer Commitment & Support Letter** 

Panasonic Support of TMCC GOED 2024.pdf.jpg

Email kharrell@tmcc.edu

Title

Dean, Technical Sciences

Philip Linscheid

Philip.Linscheid@hamiltoncompany.com

Job Titles to Be Filled CNC Operator, programmer, engineer Number of Job Openings to be Assisted 6

Average Hourly Wage for Job Hires \$21.00

**Employer Commitment & Support Letter** Hamilton updated letter of support GOED WINN.pdf

Workforce Disruption - Prior 12 Months No

# **Statement of Need**

#### **Needs Assessment**

TMCC is breaking barriers to higher education for first generation college students, students from lower socioeconomic status and the large Hispanic population we serve as a federally-recognized Hispanic Serving Institution (HSI). Training Nevadans for Nevada manufacturing apprenticeships allows apprentices to earn while they learn, a key strategy for achieving equity in employment and access to higher education.

According to the Bureau of Labor Market Statistics (BLS), employment trends are strong for manufacturing apprentices. Using the Standard Occupational Classifications (SOC) codes the employers used to register their apprenticeships, we can see that there is growth in Nevada that is outpacing the U.S., the jobs provide living wages and the training provided is currently insufficient to meet demand.

SOC 17-3026: Industrial Engineering Technologists and Technicians openings are projected to grow 17% in Nevada from 2020 - 2030, as compared to 3% in the United States with 30 projected annual openings.

The median wage for Industrial Engineering Technologists and Technicians is higher in Nevada and Reno than the U.S., with workers here earning \$63,170 per year as compared to \$62,610 nationally.

The RTI provided through this operator apprenticeship is exactly what employers are looking for with 37% requiring some college but no degree.

The only industrial or manufacturing engineering technology training programs in Northern Nevada are at TMCC and Western Nevada College. IPEDS data from 2022 shows that together we issued 8 associate's degrees, 115 certificates that took less than one year to complete and 3 certificates that took less than 2 years to complete. There is a disconnect between the BLS data that shows a projected net need of 30 hires per year through 2030 and what our employer partners are telling us; Tesla alone indicates a need to hire 300 operators annually. BLS indicates the percentage of growth is what is projected over the entirety of the time period from 2020 - 2030; it does not account for spikes or surges in hiring needs.

Similarly, employment trends remain strong for SOC 51-4041.00 machinists, with projected growth in Nevada at 11%, higher than the national average, with 120 annual opening projected through 2030. Additionally, 32,600 national machinist job openings are projected annually through 2032.

The median wage for Machinists is higher in Reno than Nevada, but slightly lower than the U.S. Workers in Reno are earning \$49,310 as compared to \$48,450 in Nevada and \$50,840 nationally.

The RTI for this apprenticeship program is exactly what employers are looking for with 50% requiring either a post-secondary certificate (33%) or some college but no degree (17%).

TMCC and WNC have the only machine tool technology programs offered in Northern Nevada. IPEDS

data from 2022 show that 38 credentials were issued between the two institutions to provide training for all of Northern Nevada, including the outlying areas. The current supply of trained machinists from TMCC and WNC is insufficient to meet projected annual demand.

\*Please see GOED WINN Labor Market Data Supporting Documentation uploaded to the "Supporting Documents" location on this application form.

# **Program Objectives and Outcomes**

#### **Program Overview**

TMCC has had a longstanding relationship with Tesla, PENA, Hamilton and other manufacturing companies in Northern Nevada. TMCC has partnered with these three companies and others to create registered apprenticeships. These registered apprenticeships are good jobs that allow students to earn wages while they learn and provide opportunities for upward mobility and earning potential.

As a designated Tech Hub, Nevada is poised to be a world leader in the circular lithium loop economy. With the Thacker Pass Project (https://lithiumamericas.com/thacker-pass/overview/default.aspx) moving forward, we will be able to source the critical minerals necessary for processing and manufacturing of lithium ion batteries. As mentioned at the Nevada Lithium Summit sponsored by GOED September 29 and 30, 2024 (https://x.com/DiversifyNevada/status/1828836529592308083), developing a trained workforce at the scale necessary is key to not only meeting consumer demands for lithium batteries in the United States, but it is a matter of national security; we cannot continue to be dependent upon exporting processing and importing critical minerals.

While TMCC has been training over a hundred manufacturing operator apprentices each year, that number is not sufficient to meet workforce demands for battery manufacturing in the region. As an example, Tesla needs to train at least 300 through June 2025 and at least 600 each year over the next three years to fill their workforce needs.

#### Educational Pathways and Timelines

The program pathways for these large companies' registered apprenticeships are provided below. Smaller companies such as VDM Metals, Veka and Vistaprint who have registered apprenticeships can benefit from this investment as well.

For Tesla, TMCC has become the onboarding program for their new operator apprentices enrolled in the Manufacturing Development Program (MDP). This program consists of 11 college credits that students take in 4 weeks. Apprentices are then fully prepared to complete 2000 hours of on the job training (OJT) at the gigafactory. The instruction is provided at TMCC's William N. Pennington Center of Applied Technology and at the new Plumb Lane Advanced Manufacturing Training Center. We run 2 cohorts of 24 each fall and spring semester and at least one cohort of 24 in the summer session. Although we are providing access to train at least 120 operator apprentices per year, it is not sufficient to meet the gigafactory's demand over the next three years.

We have been working with PENA every other week to hone their operator apprenticeship program and plan for a 24-student cohort launch in March of 2024. Their operator apprenticeship also consists of 11 credits and we plan to provide the training over a 4-week period similar to the way we onboard for Tesla. PENA employees are then fully prepared to begin the 2000 hours of OJT at the PENA factory. This will help stem the immediate need for operators.

Hamilton expects to hire 3 - 6 employees in the next 6 months as CNC controllers, operators or engineers. Because Hamilton requires 31 credits for their apprenticeship operator program it is not front-loaded. They require their apprentices to take one class at a time spread out over our 15-week semesters as they complete their 4000 - 6000 hours of OJT. This type of schedule is also utilized by our smaller companies.

#### **Employer Engagement**

Employers who provided support letters for this grant are engaged in the process of recruiting apprentices for training through TMCC's advanced manufacturing curriculum. TMCC works closely with apprenticeship partners to craft the Related Technical Instruction (RTI) for these registered apprenticeships. As mentioned, some of our employers will hire a cohort of apprentices and then send them through the RTI as their onboarding process. TMCC works closely with these employers on the scheduling of classes and the matriculation process on a first-come-first-served basis. Other companies recruit and hire the apprentices and then send them through the RTI one course at a time following the regular class term.

#### **Capacity-Building Program Design**

This proposal for ramping up registered apprenticeship advanced manufacturing training is turnkey. The curriculum has already been developed; we just need to train at the pace and scale needed by the employers. The equipment funds in this proposal will allow us to add additional training cohorts to build the worker capacity that our partner companies tell us they need. Despite the generous contributions GOED WINN has made to our advanced manufacturing programs for mobile training and for outfitting the Advanced Manufacturing Training Center on Plumb Lane, we do not have enough equipment to teach the foundational course in the operator apprenticeship programs to meet this surge in demand. This issue has limited our ability to meet these specific training demands. TMCC will continue to dedicate instructional staff to these programs and is currently seeking to hire an additional tenure-track faculty to assist with capacity. We are also working with our employer partners to identify eligible instructors among their employees to assist us with this capacity building effort. With Tesla having the largest training need, as part of our planning discussions on 10/3/24 they have pledged to provide two (2) full-time trainers to assist with the training acceleration. TMCC will work with PENA to utilize the new Advanced Manufacturing Training Center on Plumb Lane to schedule a cohort of apprenticeship training and dedicate a TMCC classroom to operator apprenticeship training starting in the spring 2025 semester. We will continue to schedule the courses needed for Hamilton's apprenticeship program to ensure any apprentices hired can access the RTI they need. This infusion of tuition funds will help remove barriers to this hiring and training surge. Funds will not be used for staffing.

#### Will this program include funding for staff?

No

#### **Justification for Existing Staff**

Our existing staff has the ability to manage the onboarding and matriculation processes for this apprenticeship expansion.

#### Recruitment

Currently, the companies with whom we sponsor apprenticeships recruit their own trainees. As part of the registered apprenticeship approval process in the State of Nevada, all companies must submit a diversity action plan to demonstrate how they are reaching out to underrepresented individuals and ensuring diversity goals are met.

#### Outcomes

Major goals and milestones with timelines for achievement. Increased capacity will commence by January 2025.

Goals and Milestones Equipment acquisition Classroom retrofit Train up to 254 hired apprentices Average starting wage \$21/ hour conditional upon employers recruiting sufficient apprentices Train up to 88 hired apprentices Timeline January 15, 2025 January 15, 2025 January, 2025 - May 2025

May 2025 - June 2025

Average starting wage \$21/ hour conditional upon employers recruiting sufficient apprentices.

#### Sustainability Plan

This one-time infusion of funding will allow our employers with registered manufacturing apprentices to ramp up hiring to meet the surge in demand for battery manufacturing through June 30, 2025. In response to the unprecedented demand for skilled apprentices in our region, the proposed workforce development program will utilize a "first come, first served" tuition model for apprentice trainees. This approach ensures that those industry partners and apprentices who are ready to engage in immediate training can swiftly access the necessary educational resources without delays, aligning with the urgency of local workforce needs. Per NRS 231.1467 7c, tuition and training fees will be covered for apprentices whose program costs are not already met by the program budget or other workforce development funding. This provision enables us to directly support industry partners during this one-time surge in apprenticeship demand, filling critical skills gaps while avoiding long-term tuition dependency. Tesla has pledged to provide 2 full-time trainers through December 2027 to continue the ramp up as they have the largest training demands. The tuition dollars requested for this project will help immensely, but will not cover all of the training needed for our partners. TMCC has a Department of Labor (DOL) grant that will provide \$166,000 annually to companies through September 30, 2027. Additionally, Tesla will be investing \$394,000 in tuition in FY 25, and approximately \$1.1 million in FY 26 and FY 27 to achieve the number of journeymen needed. Funding from our DOL grant is made available as companies solidify their cohorts, at which time the classes can be added to the schedule. Tuition funding is made available in compliance with NRS 231.1467 7c which allows us - To pay training fees or tuition for the program of workforce recruitment, assessment and training, which are not otherwise covered by the program budget or other workforce development funding As the apprenticeship demand normalizes over time, sustained tuition support will no longer be necessary. ensuring that this funding is used efficiently for the immediate workforce expansion, without creating ongoing financial obligations for the program. Once critical operator positions are filled, TMCC can adjust the pace of training to provide a steady stream of trained apprentices.

The additional equipment will allow us to expand the number of cohorts offered and ensure the skills needed for success are mastered. The equipment will enable TMCC to provide essential training for many years, ensuring long-term program sustainability beyond the terms of this grant and also fulfill requirements in NSHE-approved programs at TMCC (AAS degree and workforce certificates).

# Is the program offered consistent with the Unified State Plan (WIOA)? Yes

#### **Supporting Documents**

GOED WINN Labor Market Data Supporting Documentation for docx

# **Workforce Diversity Action Plan**

WINN requires that projects consider how to ensure equitable access to high-skill and high-wage opportunities for all Nevadans.

This application must include an explanation of the actions that will be taken and strategies that will be implemented to promote workforce diversity and the goals and performance measures which will be used to measure the success of the plan in achieving those goals.

A strong plan will show an understanding of the interventions and supports diverse participants will need to prepare them for success and include methods for monitoring at the training and employment levels of the project.

GOED seeks to read plans including efforts to address the needs of Veterans, Gender inclusion and penetration in non-traditional employment, recipients of public assistance, justice-involved citizens, racial and ethnically diverse students, and persons with disabilities.

#### **Diversity Action Plan**

TMCC's demographics show that 51% of TMCC's student population are minorities (with 34% being Hispanic). 51% percent of the student population are first-generation and 54% percent of the student population were made up of women, and 46% were men.

In keeping with TMCC's commitments to ensure an inclusionary environment that honors diversity, specific outreach activities and marketing efforts are in place to address target populations. TMCC offers programs & resources that support this commitment to a variety of diverse groups including but not limited to veterans, CTE gender equity needs, recipients of public assistance, justice-involved citizens, racial & ethnically diverse students, and students with disabilities. We are a Hispanic Serving Institution and recruit directly from the diverse community we serve. We plan on working with our special populations groups at TMCC to increase representation, inclusion, utilization and completion rates of the program.

We plan on promoting this program through established pipelines including tours of our facility, the CTE Open House, and interface with employers at our sector-specific Career Cafes. We also plan on utilizing our CTE Assistant Director to support CTE gender equity needs by promoting this traditionally male careers to female students within the school district and in the community as a whole. We also want to make sure that our students who are recipients of public assistance are being encouraged to participate. So we plan on utilizing our Counseling Center and food bank (Wizards Warehouse) to promote the program and offer a space for our food insecure students to get the resources they need in order to be successful. We will continue outreach activities and marketing efforts that will reach disabled, underrepresented, and racially/ethnically diverse student populations, from middle school and high school. TMCC will actively recruit in Spanish-language media and our diverse recruitment team will promote this program opportunity to diverse audiences at schools, career fairs, open houses, and during campus tours.

Through the orientation process, we will make sure that the additional students we are recruiting are made aware of our variety of resources that can assist them in meeting their educational & workforce goals including the Career Hub, Counseling Center, Financial Aid Office, Academic Advising, TRIO program, and the Diversity Center.

#### Workforce Diversity Commitment Statement

The Nevada System of Higher Education (NSHE) is committed to providing equal opportunity and access to programs and employment, and places of work and learning free of discrimination. Likewise, TMCC's policies regarding equal employment opportunity and affirmative action represents our commitment to supporting practices that seek to achieve equal opportunity in employment and advancement without regard for sex, age, race, color, religion, physical and mental disability, creed, national origin, veteran status, sexual orientation, genetic information, gender identity, or gender expression.

TMCC's Equity, Inclusion and Sustainability Office pledges to address, work with, and uphold a series of goals and commitments to ensure an inclusionary environment that honors diversity and integration. These goals and commitments include:

\*Building and maintaining a non-discriminatory environment in all facets of TMCC's programs as they relate to all

members of TMCC including faculty, staff and students.

\*To assist in developing diverse workforce, through outreach and affirmative action efforts, that reflect a demographic distribution in the service area, with regard to race, color, religion, gender, sexual orientation,

disability, veteran status and age.

\*To work with TMCC's faculty and staff to facilitate the integration of diversity content into curricula.

\*To provide support to TMCC's enrollment management, recruitment and retention support efforts.

\*To provide direction in establishing and maintaining clearinghouse of information and resources on issues of

access, equity and inclusion and services to faculty, staff and students.

\*To represent TMCC in the community at large in promoting and disseminating TMCC's commitment to equal

opportunity, equity and inclusion at all levels of operations.

As mentioned in the recruitment section of this application, the companies with whom we sponsor apprenticeships recruit their own trainees. As part of the registered apprenticeship approval process in the State of Nevada, all companies must submit a diversity action plan to demonstrate how they are reaching out to underrepresented individuals and ensuring diversity goals are met.

#### Statement to Comply with Federal & State Law

TMCC is an EEO/AA (equal employment opportunity/affirmative action) institution. TMCC does not discriminate on the basis of race, color, national origin, sex, disability, age, gender, including pregnancy-related condition, gender identity or expression, sexual-orientation, protected veterans status, genetics, or religion in their programs and activities and provides equal access to facilities to all. Similarly, there shall be no difference in the treatment of persons who file charges of discrimination, participate in a discrimination proceeding, or otherwise oppose discrimination. It is our policy to comply fully with non-discrimination provision of all state and federal regulations in all programs and activities, including, but not limited to recruitment, admission, financial aid, activities, hiring, promotions, training, terminations, benefits and compensation.

### **Request for Funding**

### Has any part of this program received prior capacity funding?

Yes

#### **Justification for Continued Capacity Funding**

One of the locations for the training was previously funded with a GOED WINN grant. This is the Plumb Lane Advanced Manufacturing Training Center (AMTC). However, the TMCC Lithium Loop Manufacturing Apprenticeship Program proposal is not requesting continued funding for the AMTC.

Total Project Cost	WINN Funding Request
\$3,451,818.00	\$1,029,884.00

WINN is primarily a reimbursement-based grant. Can your institution cover the costs included in your budget without advanced funding? Yes

Reimbursement invoices must be submitted quarterly, but may submitted as often as monthly. What are your invoicing plans? Quarterly

#### **Cost Estimates**

Truckee Meadows Community College\_KES17325-1\_Tesla Training Expansion\_100424\_eg (1).pdf

KHarrell - CDW-G Quote #1CFVMW0 - 32 laptops and 1 Charging Cart - 20240904.pdf

TMCC-Mfg-Apprentice-24-25-WINN-Application-Budget-Template .xlsx

Budget Narrative Lithium-Loop-Mfg-Apprenticeship-Budget-Narrative (v.2).docx

#### **APPLICATION FOR WINN FUNDS - BUDGET BREAKDOWN**

APPLICANT NAME: TMCC		
PROJECT NAME: Lithium Loop Manufacturing Apprenticeshi	p Program	
PROJECT PERIOD: November 14, 2024 - June 30, 2025		
PRIORITY PROGRAM COSTS		
Enter the total cost for each line in the far right column	То	tal WINN Request
Candidate Assessment Fees		
Curriculum Development and Instructional Services		
Equipment or Technology for Training		\$449,667.57
	Priority Costs Subtotal:	\$449,667.57
ALLOWABLE PROGRAM COSTS		
Enter the total cost for each line in the far right column	То	tal WINN Request
Training Fees (registered apprentice tuition)		\$549,515.43
Analysis of On-Site Training		
Administrative or Support Personnel (May not exceed 10% of total request)		
Instructional Facility Costs (air hook ups for equipment)		\$12,000.00
Program Recruiting and Promotion		
Other Necessary Costs (equipment shipping)		\$18,701.00
	Non-Priority Costs Subtotal:	\$580,216.43
	TOTAL WINN REQUEST:	\$1,029,884.00

Please contact Elaine Silverstone at 702-486-0609 with any questions regarding the budget breakdown template.

#### TOTAL PROJECT FUNDING SOURCES

APPLICANT NAME:	TM	CC					
PROJECT NAME:	TN	ICC-ACE Accelerat	ed	Early College Auto	/Diesel Program	۱	
			So	ource of Funds			
Budget Category		WINN Funds		Source Name	Source Name		<u>Total</u>
Priority Program Costs	\$	449,667.57	\$			\$	449,667.57
Allowable Program Costs	\$	580,216.43	\$			\$	580,216.43
	Total Budget:	\$1,029,884.00		\$0.00	\$0.0	00	\$1,029,884.00
	Addi	tional Information on	Tota	al Project Cost, if any:			
<b>T</b> 1112 - 12 (12 - 1			·				
i uition is for t	ne one-time ramp	up to meet manuf	ract	uer employer need	is to mass hire a	ppren	tices.

#### WINN Budget Narrative Instructions

In a separate Word document, develop a Budget Narrative that will provide the justification and information necessary to determine how the budget was calculated and the relationship between budgeted items and the grant funded program's goals. The budget narrative must explain how each cost is necessary for the program, and match those items listed in the Program Narrative.

There should be section for each line of the WINN Budget you intend to submit and that section should include the total cost and how that cost was calculated and what expenses fall within that line item. For example, the Candidate Assessment Fee section may indicate a total ask of \$1000 with justification such as deploying a WorkKeys assessment prior to program entry at a cost of \$50 for 20 participants.

The Instructional Services section should indicate hiring intention and corresponding costs (salary/fringe for hire, for how many months or consultant monthly fee, etc.) If equipment is to be purchased, its proposed use and relationship to the grant funded program should be described. All equipment purchased must be necessary to the program and used by grant funded personnel. Both the Equipment section and the Other Necessary Cost section must itemize each cost contained within the total line.

### Lithium Loop Manufacturing Apprenticeship Program Budget Narrative

(10-6-24 version) Total WINN Request: **\$1,029,884** 

#### Priority Program Cost: \$449,667.57

1) Equipment or Technology for Training: \$449,667.57

#### 1) Skill Boss Trainers: \$372,000

TMCC is partnered with a number of companies to provide the related instructional content for registered apprenticeships in advanced manufacturing that train production operators. The key course in this pathway is MPT 101: Basics of Operations and Maintenance. This course teaches the basics of automation systems and common maintenance practices. The Amatrol Skill Boss is the equipment of choice for teaching the learning outcomes and hands on skills in the course.

#### 2) Amatrol Toolkits: \$32,480.00

The accompanying tool kit is an important educational adjunct to the Skill Boss, teaching students how to use micrometers and other hand tools associated with maintenance. This course is not only required for several registered apprenticeships in manufacturing, but it is also a requirement in TMCC's Automation and Robotics, Manufacturing Technologies AAS Degree, and TMCC's Industrial Maintenance for Automation, Skills Certificate. Therefore, an investment in this equipment will not only assist our lithium ion battery manufacturing companies with a ramp up of apprentice hiring and training, but it will sustain TMCC's industrial maintenance, automation and robotics programs for years to come.

#### 3) Laptops: \$39,575.68

Laptops are necessary for students to access software and technical user manuals used in the apprenticeship manufacturing courses. This investment will provide laptops for 32 students to use during class time.

#### 4) Laptop Cart with Charging Station: \$1,151.89

The laptop cart will charge and store the laptops in between class sessions.

#### 5) Stools: \$2,960.00

16 additional stools will be needed to outfit this classroom.

#### 6) Shelving: \$1,500

Shelving units will need to be purchased and installed to hold the Skills Boss Trainers when disconnected from power and air to allow for the other training courses in the apprenticeship to be taught and desktops to be used for other skill sets.

#### FY25 Total Equipment Cost: \$449,667.57

ITEM	CATEGORY	QUANTITY	UNIT COST	AMOUNT
Amatrol Skill Boss Trainer	EQUIPMENT	16	\$23,250	\$372,000.00
Amatrol Tool Kit	EQUIPMENT	16	\$2,030	\$ 32,480.00
Laptops	EQUIPMENT	32	\$1,236.74	\$ 39,575.68
Laptop charging cart	EQUIPMENT	1	\$1,151.89	\$ 1,151.89
Stools	EQUIPMENT	16	\$185.00	\$ 2,960.00
Shelving	EQUIPMENT	6	\$250.00	\$ 1,500.00
TOTAL				\$449,667.57

#### Allowable Program Costs: \$580,216.43

- 1) Training Fees: \$549,515.43
- 2) Instructional Facility Costs: \$12,000.00
- 3) Shipping Costs: \$18,701.00

#### 1) Training Fees: \$549,515.43

To assist manufacturing companies with the capacity to hire the workforce needed to produce sufficient lithium ion batteries to meet demand, dollars to offset tuition costs for registered apprenticeships are needed. Our largest partners' operator apprenticeship programs are 11 credits, which costs approximately \$1700 per apprentice when all NSHE fees are included. Smaller partners have few apprentices in the pipeline who may only take one or two 3-credit classes at a time. These tuition dollars will help all our partners ramp up to meet consumer demand and are available on a first come first served basis as employers fill their recruiting cohorts. These dollars have the potential to train 317 apprentices in our 11-credit apprentices hips leaving funding for our smaller companies to have access to ramp up funds for about 25 apprentices to take a 3-credit course.

#### 2) Instructional Facility Airdrop Installation Costs: \$12,000

TMCC will be dedicating a classroom to expand training for MPT 101. This classroom will need air drops installed to run the Skill Boss Trainers. TMCC has already outfitted a similar flex classroom with air drops at both the William N. Pennington Center of Applied Technology and the new Advanced Manufacturing Training Center at the PENA facility on Plumb Lane. We have the expertise to make this renovation.

#### 3) Shipping Costs: \$18,701.00

Necessary cost for shipping 16 Skill Boss trainers essential for training the registered apprentices.

#### **GOED WINN Labor Market Data Supporting Documentation for**

#### TMCC - Lithium Loop Manufacturing Apprenticeship Program

According to the Bureau of Labor Market Statistics (BLS), employment trends are strong for manufacturing apprentices. Using the Standard Occupational Classifications (SOC) codes the employers used to register their apprenticeships, we can see that there is growth in Nevada that is outpacing the U.S., the jobs provide living wages and the training provided is currently insufficient to meet demand.

#### 17-3026.00 - Industrial Engineering Technologists and Technicians

Industrial Engineering Technologists and Technicians openings are projected to grow 17% in Nevada from 2020 - 2030, as compared to 3% in the United States.

### **Nevada Employment Trends**

17-3026.00 - Industrial Engineering Technologists and Technicians

View trends for state:	Nevada	✓ Go
In Nevada:		
Employment data for <b>Indust</b>	trial Engineering Te	echnicians.
Emplo	yment 230 em (2020)	nployees
Projected emplo	(2030) 270 em	nployees
Projected g (202	growth 17% 20-2030)	
Projected a	annual 30	
(202	20-2030)	

Nevada source: Projections Central 2020-2030 long-term projections &. United States source: Bureau of Labor Statistics 2022-2032 employment projections &. "Projected growth" represents the estimated change in total employment over the projections period. "Projected annual job openings" represent openings due to growth and replacement.

The median wage for Industrial Engineering Technologists and Technicians is higher in Nevada and Reno than the U.S., with workers here earning \$63,170 per year as compared to \$62,610 nationally.



BLS 2023 wage data

The RTI provided through this operator apprenticeship is exactly what employers are looking for with 37% requiring some college but no degree.

# **Education**

How much education does a new hire need to perform a job in this occupation? Respondents said:



The only industrial or manufacturing engineering technology training programs in Northern Nevada are at TMCC and Western Nevada College. IPEDS data from 2022 shows that together we issued 8 associate's degrees, 115 certificates that took less than one year to complete and 3 certificates that took less than 2 years to complete. There is a disconnect between the BLS data that shows a projected net need of 30 hires per year through 2030 and what our employer partners are telling us; Tesla alone indicates a need to hire 600 operators annually. BLS indicates the percentage of growth is what is projected over the entirety of the time period from 2020 - 2030; it does not account for spikes or surges in hiring needs.

#### 51-4041.00 - Machinists

Similarly, employment trends remain strong for machinists, with projected growth in Nevada at 11%, higher than the national average through 2030. Additionally, 32,600 national machinist job openings are projected annually through 2032.

# Nevada Employment Trends

View trends for state:   Nevada   Go     In Nevada:   1,030 employees   In the United States     Employment (2020)   1,030 employees   Employment (2022)     Projected employment (2030)   1,140 employees   Projected employment (2032)     Projected growth (2020-2030)   11%   Projected growth (2022-2032)     Projected annual job openings   120   Projected annual job openings	51-4041.00 - <u>Machi</u>	nists			
In Nevada:   In the United States     Employment (2020)   1,030 employees   Employment (2022)     Projected employment (2030)   1,140 employees   Projected employment (2032)     Projected growth (2022-2030)   11%   Projected growth (2022-2032)     Projected annual job openings   120   Projected annual job openings	View trends for state:	Nevada	~ G	Go	
Employment (2020)1,030 employeesEmployment (2022)Projected employment (2030)1,140 employeesProjected employment (2032)Projected growth (2020-2030)11%Projected growth (2022-2032)Projected annual job openings120Projected annual job openings	In Nevada:			In the United St	tes
Projected employment (2030) 1,140 employees Projected employment (2032)   Projected growth (2020-2030) 11% Projected growth (2022-2032)   Projected annual job openings 120 Projected annual job openings	Emplo	oyment (2020)	1,030 employees	Employ	ent 022)
Projected growth (2020-2030) 11% Projected growth (2022-2032)   Projected annual job openings 120 Projected annual job openings	Projected emplo	oyment (2030)	1,140 employees	Projected employ	ent 032)
Projected annual 120 Projected annual job openings job openings	Projected (20	growth (20-2030)	11%	Projected gr (2022	wth 032)
(2020-2030) (2022-2032)	Projected job op 20	annual penings 120-2030)	120	Projected aı job ope (2022	ual ngs 032)

Nevada source: Projections Central 2020-2030 long-term projections & United States source: Bureau of Labor Statistics 2022-2032 employment projections & "Projected growth" represents the estimated change in total employment over the projections period. "Projected annual job openings" represent openings due to growth and replacement.

The median wage for Machinists is higher in Reno than Nevada, but slightly lower than the U.S. Workers in Reno are earning \$49,310 as compared to \$48,450 in Nevada and \$50,840 nationally.



BLS 2023 wage data

The RTI for this apprenticeship program is exactly what employers are looking for with 50% requiring either a post-secondary certificate (33%) or some college but no degree (17%).

# **Education**

How much education does a new hire need to perform a job in this occupation? Respondents said:

36%	High school diploma or equivalent required 🤫
33%	Post-secondary certificate required
17%	Some college, no degree required 🧿

TMCC and WNC have the only machine tool technology programs offered in Northern Nevada. IPEDS data from 2022 show that 38 credentials were issued between the two institutions to provide training for all of Northern Nevada, including the outlying areas. The current supply of trained machinists from TMCC and WNC is insufficient to meet projected annual demand.

# TISLA

Letter of Support Dear Dr. Harrell,

Tesla is pleased to partner with Truckee Meadows Community College (TMCC) in support of scaling Tesla's workforce development efforts. Tesla is committed to growing our existing partnership with TMCC to increase the Manufacturing Development Program (MDP) and START Manufacturing. The MDP is a registered apprenticeship where employees receive a blend of coursework and on the job related training. The START Manufacturing program builds skillsets for highly sought-after technician roles. Through our partnership with TMCC, we are able to develop a strong manufacturing workforce.

Tesla values TMCC's leading curriculum in manufacturing, combining academic math, electro-mechanical and general manufacturing processes and skills. We look forward to continue to upskill our workforce in support of Tesla's mission – to accelerate the worlds transition to sustainable energy.

Through the expansion with TMCC, Tesla would expand the MDP program to the goals set forth below:

Job Title	Production Operator
# Of Positions/Year	300
Estimated Hourly	\$21.00-\$22.00 + benefits

Tesla fully supports and values our partnership with TMCC. If you have any further questions, please don't hesitate to reach out. Thank you for your continued partnership.

**Ricky Baeza** 

**Program Manager, Recruiting and Workforce Development** Sincerely,

### **Panasonic ENERGY**

September 19, 2024

Kim Harrell, Ph.D. Dean, Technical Sciences Division William N. Pennington Applied Technology Center 475 Edison Way, EDSN 200A Reno, NV 89502

Dear Dr. Harrell:

Panasonic Energy of North America (PENA) is pleased to offer its support for Truckee Meadows Community College (TMCC) efforts to seek Nevada Governor's Office of Economic Development (GOED) grants for development of Advanced Manufacturing apprenticeships. If awarded, PENA's understanding is that GOED funding could help cover the cost of TMCC tuition for apprentices hired by PENA.

PENA's partnership with TMCC provides a non-traditional, low-risk entry point into a training program that leads to, or is concurrent with, new employment. Further, PENA believes that TMCC wrap-around service, including adult basic education, job coaching, and English language support, will assist underrepresented student populations to access training, increase training completion, skill acquisition, and job sustainability.

PENA greatly appreciates the opportunity to partner with TMCC and GOED in the development of Advanced Manufacturing apprenticeships and the impact they will have in providing training to new and incumbent employees, as well as first-time manufacturing job seekers.

Should you need additional information, please contact Todd Thurston at (775) 384-7726, or todd.thurston@us.panasonic.com.

Sincerely

Sarah King) Vice President, Human Resources - Strategy

#### PANASONIC ENERGY OF NORTH AMERICA

1 ELECTRIC AVE. STE 110, SPARKS, NV 89437 P: 775.384.7726 E: energy@panasonic.com September 18, 2024

Hamilton Company P.O. Box 10030 Reno, NV 89520-0012 U.S.A Telephone +1-775-858-3000 Toll Free 800-648-5950 Fax +1-775-856-7259 www.hamiltoncompany.com

RE: Letter of Commitment

To Whom it May Concern:

As a member of the Truckee Meadows Community College (TMCC) Apprenticeship program, Hamilton Company is committed to collaborating with TMCC. TMCC's apprenticeship program has provided our company with students who support Hamilton's long-standing operations in Nevada and our continued success within the Life Science industry. The apprenticeship program and partnership with TMCC provides professional training for our apprentices that is beneficial to our company's efforts to optimize processes and improve service levels, both essential for maintaining manufacturing excellence and upholding our status as a leading manufacturing hub in Reno. We estimate hiring 3-6 employees in the next 4-6 months as either CNC Operator, CNC Programmer, and Manufacturing Engineer between \$20-\$22/hour.

As an apprenticeship partner, Hamilton Company apprentices participate in the Computer Numerical Control (CNC) Machine Operator and CNC Set Up Programmer apprenticeships. Hamilton Company is committed to providing employees as apprentices and providing leveraged resources in employee wages, which is tracked and submitted via a quarterly report to TMCC. We are committed to recruiting, interviewing, and selecting the candidates to go into the apprenticeship program, by conducting outreach to target populations to diversify the talent pool. We mentor and supervise pre-apprentices and apprentices during their OJL. All apprenticeship programs will follow the Work Process Schedule for their area of instruction and meet the required behavioral competencies and follow required instructional requirements. We also make sure to stay involved with any changes or updates to the apprenticeship program by having monthly meetings. We also attend the Advanced Manufacturing advisory board meetings to give ideas and stay on top on industry trends. Additionally, Hamilton provides financial incentives for its workers who complete apprenticeship training.

TMCC apprenticeships have been a critical pipeline for Hamilton's undergraduate internships, apprenticeships, and entry-level employees. The continuance and growth of the program will help prepare future generations with the skillsets Hamilton Company requires, right in our own backyard. Hamilton Company looks forward to our continued partnership and collaborations with Truckee Meadows Community College and the apprenticeship program.

Sincerely,

Matthew Hamilton Vice CEO



2851 Spafford Street Davis, CA 95618 1-800-698-3249

Quotation for: Truckee Meadows Community College Kimberly Harrell		uoted :!	10/04/2024
		xpires :!	12/04/2024!
Reno, NV 89512	Sale	s Rep :	Erik Gonzales
Quotation for the Tesla Training Expansion Program			
Item & Description	Qty	Unit Cost	Total Cost
Note: This unit pricing is based on the purchase of 15 or more	e units.		
95-MSB1 Skill Boss Manufacturing Required for MSSC's CPT+ Certification and used to assess manufacturing skills in the fields of Safety, Quality, Production Processes, and Maintenance Awareness. Requires 120V/60Hz/1p electrical, 33934 Hand Tool Package, and compressed air. Recommended 82-610 Mobile Technology Workstation or equivalent.	16 oh	23,630.00	378,080.00
Includes: (1) Operator Station, (1) Parts Feeder, (1) Aluminum Wo Surface with Handles, (1) Pick and Place Robotic System, (1) C34100 Instructor's Guide, (1) D34100 Maintenance and Operatio Manual, (1) K34100 Instructor's Resource PCD.	ork on		
Special Discount	16	-380.00	-6,080.00
33934 Hand Tool Package - Skill Boss Manufacturing Required for 95-MSB1 and 95-MSB2AB. Includes: Mini Grease Gun, Assorted Wrenches, Hose Cutter, Shi Kit, Screwdrivers, Dial Indicator, Tension Tester, Level, Rule, Extension Bar, Ruler, Micrometer, Tape Measure, Feeler Gauge, Dial Calipers, and Multimeter.	16 m	2,030.00	32,480.00
	S	ub Total	404,480.00
	Estimated	Freight	18,701.00
	Delivere	ed Total	\$423,181.00
Klein Educational Systems, Inc Email Purchase Orders to <u>orders@kleinedur</u> 2851 Spafford Street Davis, CA 95618 Toll Fre Prices Valid for 60 Days Terms Net 30 Days Estin	<b>c.</b> cational.co e: 800-698- nated Delive	<mark>m</mark> 3249 ery TBD	



# **Review and Complete Purchase**

#### SUSAN LUNDAHL,

Thank you for considering CDW•G for your technology needs. **If you are an eProcurement or single sign on customer, please log into your system to access the CDW site.** You can search for your quote to retrieve and transfer back into your system for processing.

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1CFVMW0	10/4/2024	KIMBERLEY HARRELL	1939303	\$40,727.57

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QUOTE DETAILS				
ITEM	QTY	CDW#	UNIT PRICE	EXT. PRICE
Lenovo ThinkPad P14s Gen 5 - AI Ready - 14" - AMD Ryzen 7 Pro - 8840HS - AM	32	7934566	\$1,236.74	\$39,575.68
Mfg. Part#: 21ME001CUS Contract: E&I CNR01439 SMA NSHE Catalog (CNR01439)				
Tripp Lite 36Port AC Charging Cart Storage Station Chromebook Laptop Tablet	1	4460961	\$1,151.89	\$1,151.89
Mfg. Part#: CSC36AC				
UNSPSC: 56101535				
Contract: E&I CNR01439 SMA NSHE Catalog (CNR01439)				

	SUBTOTAL	\$40,727.57
	SHIPPING	\$0.00
	SALES TAX	\$0.00
	GRAND TOTAL	\$40,727.57
PURCHASER BILLING INFO	DELIVER TO	
Billing Address: TRUCKEE MEADOWS COMMUNITY COLLEGE ACCTS PAYABLE 7000 DANDINI BLVD ACCOUNTS PAYABLE RM# RDMT230 RENO, NV 89512-3999 Phone: (775) 673-7111 Payment Terms:	Shipping Address: TRUCKEE MEADOWS COMMUNITY COLLEGE ATTN:KIMBERLEY HARRELL 7000 DANDINI BLVD RDMT 205 RENO, NV 89512-3999 Phone: (775) 673-7111 Shipping Method: UPS Freight LTL, Special Services	
	Please remit payments to:	
	CDW Government 75 Remittance Drive Suite 1515 Chicago, IL 60675-1515	



### Sales Contact Info

# Bobby Lopez | (866) 708-1698 | bobby.lopez@cdwg.com

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# Truckee Meadows Community College William N. Pennington Applied Technology Center







