



**Northern Rural
Energy Network**

Community & Tribal Partnerships in Rural Northern California

**17th Annual California Climate and Energy Forum
10:30AM-11:45AM**





Agenda

- Poll Responses
- Brief Overview of NREN (5 Min)
- Blue Lake Rancheria & Redwood Coast Energy Association (20 Min)
- Sierra Energy Reimagined & Sierra Business Council (10 Min)
- Lake Area Planning Council & Partnerships (10 min)
- Panel Q&A (10 Min)
- Activity



Session Poll:

What is the highest value of community partnerships to program implementers, and how can these partnerships best increase capacity within community partner organizations?





Stephen Kullmann

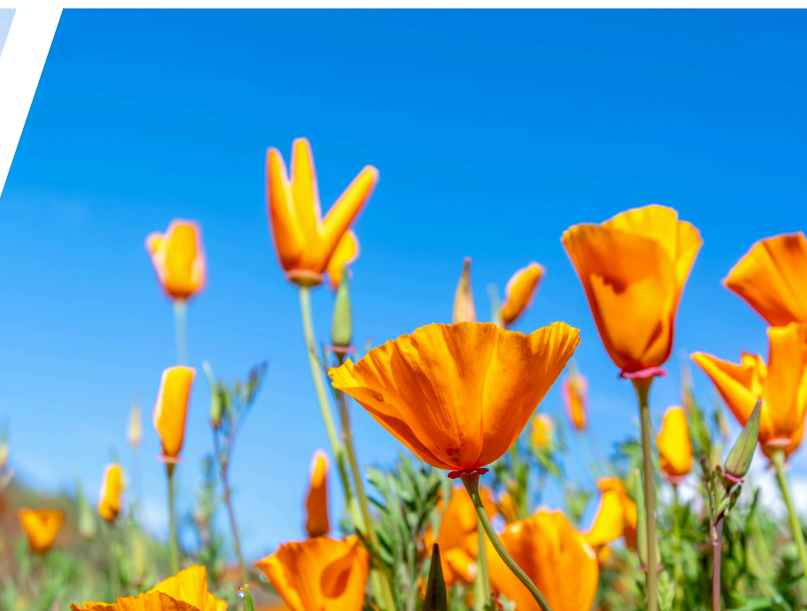
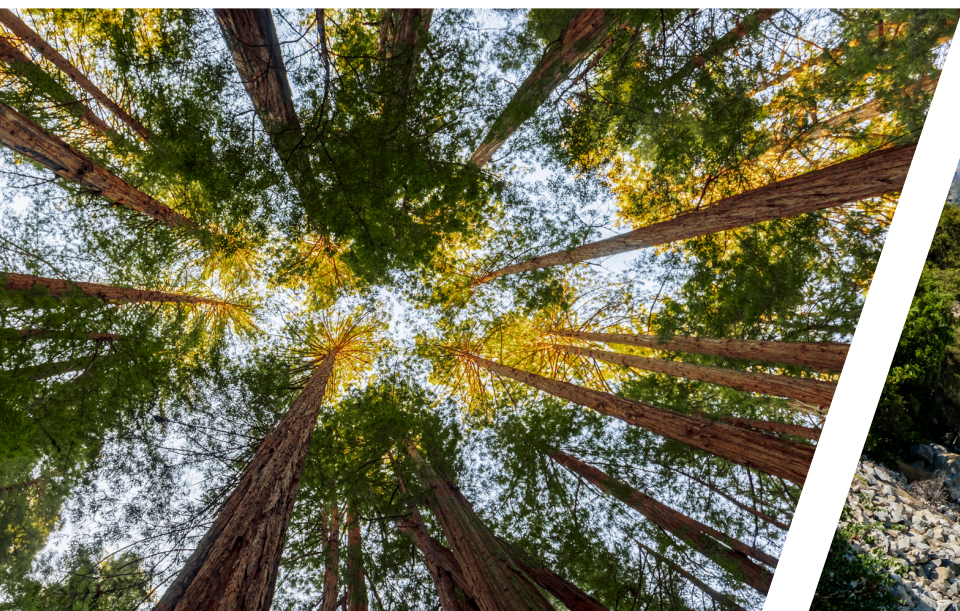
Director of Customer Programs

Redwood Coast Energy Authority



Northern Rural Energy Network

YOUR LOCAL ENERGY SOLUTIONS





Our Mission

At Northern Rural Energy Network, we offer energy efficiency programs to rural communities, delivering cost savings and strengthening community resilience for the North Coast, Lake County, and the Sierra Nevada.



Our Partner Agencies



**Redwood Coast Energy
Authority (RCEA)**



**Mendocino Council of
Governments (MCOG)**



**Sierra Business Council
(SBC)**



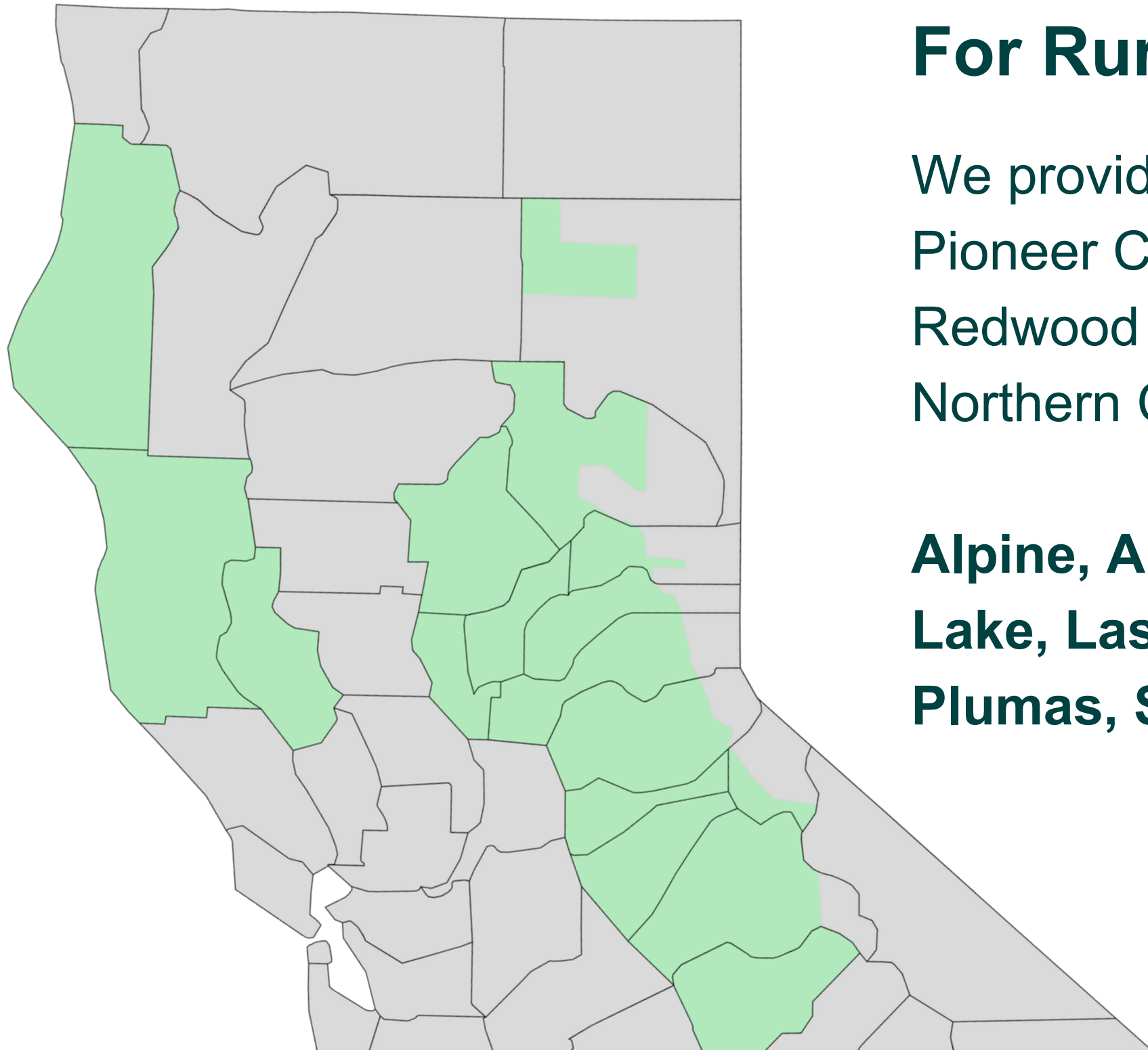
**Lake Area Planning Council
(Lake APC)**



For Rural, By Rural:

We provide energy efficiency programs and services to PG&E, Pioneer Community Energy, Sonoma Clean Power, and Redwood Coast Energy Authority customers in the following Northern California counties:

Alpine, Amador, Butte, Calaveras, El Dorado, Humboldt, Lake, Lassen, Mendocino, Mariposa, Nevada, Placer, Plumas, Sierra, Sutter, Tuolumne, and Yuba.





Unique characteristics of Rural Northern California

- Rural Hard to Reach population = expensive to serve
- ~19% of land mass with 4% of population. Average ~55 people per square mile
- Older housing stock needing weatherization, electrical system and panel upgrades
- Unreliable grid connections/limited capacity
- 31% non-regulated fuel users with some counties as high as 80% (2019-23 American Community Survey)



Partnership Spotlight

Redwood Coast Energy Authority (RCEA) and Blue Lake Rancheria focused on resilience, equity, and community impact.

Working together to support sustainable energy initiatives and Tribal community leadership.





Heidi Moore-Guynup

Director of Tribal and Government
Affairs/Sustainability



**BLUE LAKE
RANCHERIA**



BLUE LAKE RANCHERIA

**Community-Minded
Clean Energy Innovators**



Presented By: **Heidi Moore-Guynup, MA, NCSP**

6 Hours North of San Francisco, 13 miles East of Humboldt Bay



Blue Lake Rancheria is located in rural Northern California



Well known as a clean energy innovator and leader. Commissioned first-of-its-kind behind the meter microgrid.

Provides resilient energy resources when access to the grid is compromised.

2016 Obama Clean Energy Champion Award



BLUE LAKE RANCHERIA

BLR's Diverse Approach Towards Decarbonization

- Microgrids
- Morbug (portable solar generator)
- Hotel Remodel (updated HVAC, reclaimed wood, LEED standards, etc.)
- Land Acquisitions (400 acres of forested land and 250 acres of SLR-vulnerable coastal lands)
- EV purchases
- Equipment Upgrades
- Sea Level Rise Mitigation
- Restoration Practices (Native Nursery)
- Cultural Burns
- Air and Water Quality Monitoring
- Data Dashboard

GREEN ECONOMIES



Strategic Partnerships

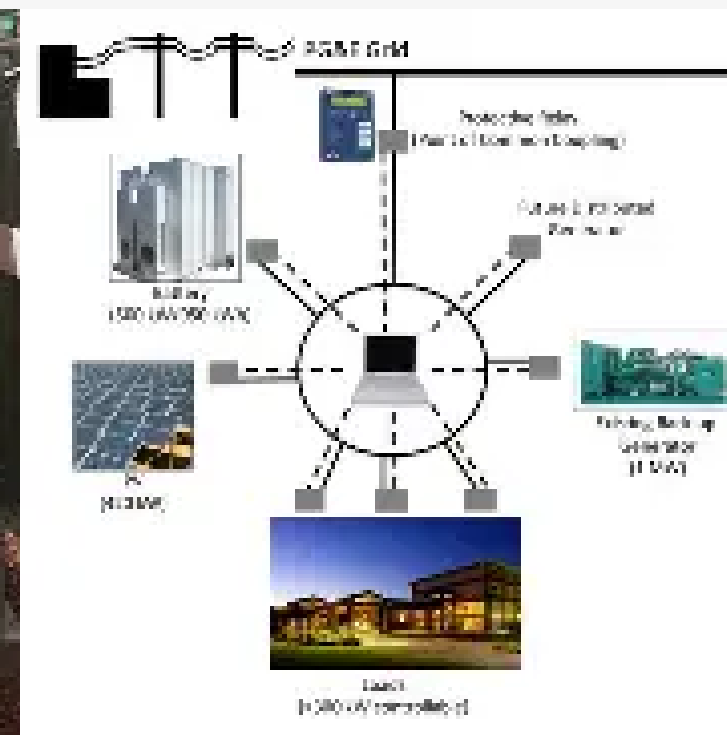
- Redwood Coast Energy Authority (NREN)
- Schatz Energy Research Center
- Cal Poly Humboldt
- College of the Redwoods
- Humboldt County Office of Education
- CORE Hub
- Alliance for Tribal Clean Energy
- Lost Coast Ventures
- Startup Humboldt
- County of Humboldt
- Hoopa Valley Tribe
- Yurok Tribe
- Karuk Tribe



What is a Microgrid?

A microgrid is a section of the larger electrical grid that can be disconnected and function autonomously. A microgrid consists of:

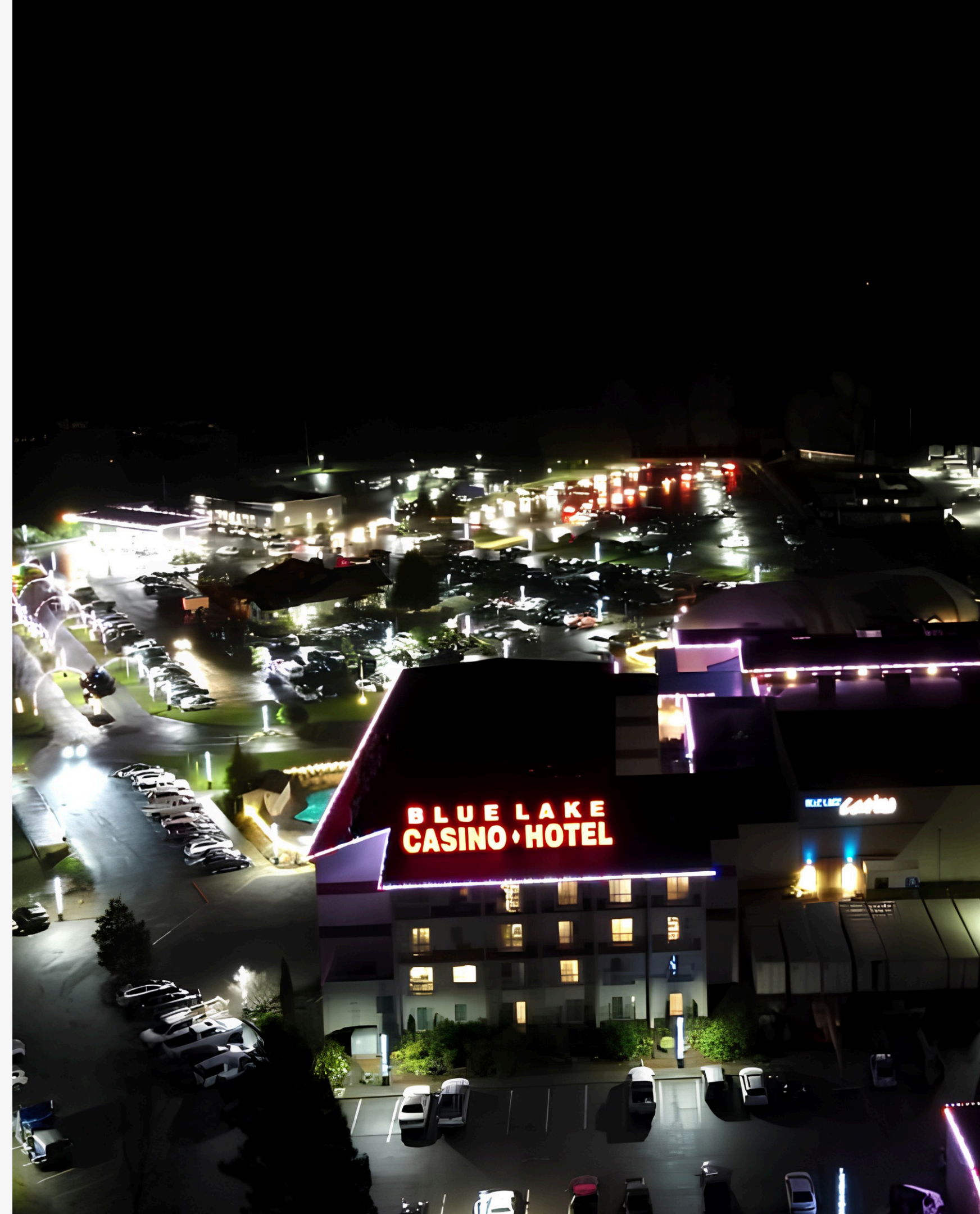
- Generation sources (often renewable), e.g., solar
- Energy storage (usually batteries)
- Smart controls that allow autonomous operation in grid-connected or islanded states



Why Does this Matter?

The Blue Lake Rancheria has a microgrid system that allows the Tribe to become an "island of electrical activity" during power outages, including public safety power shutoffs. This has enabled the Tribe to provide critical support to the community during these events, such as providing power for medical devices and acting as a command center for emergency responders.

- December 20, 2022.
- PPS Events
- Office of Emergency Services.
- MOU's with multi-county agencies.
- Hotel, Restaurant, Gas Station, Ta'm, Health Clinic



Tribal Energy Resilience and Sovereignty (TERAS) Project

- Collaboration between three Tribes
- BLR will serve as the demonstration site for designing and commissioning a nested (networked) microgrid
- Hoopa 1101- 142 circuit miles of the poorest-performing circuit in California
- Partnership with Schatz Energy Research Center and the Redwood Coast Energy Authority
- \$200 million project (\$88 million from DOE)



TERAS Impacts and Benefits...

- Reliable Electrification
- Cost Savings/Revenue Generation
- Reduced Emissions in culturally sensitive areas
- Emergency Response Opportunities
- Maximum Flexibility with electricity
- Increased Tribal Independence
- Tribal jobs



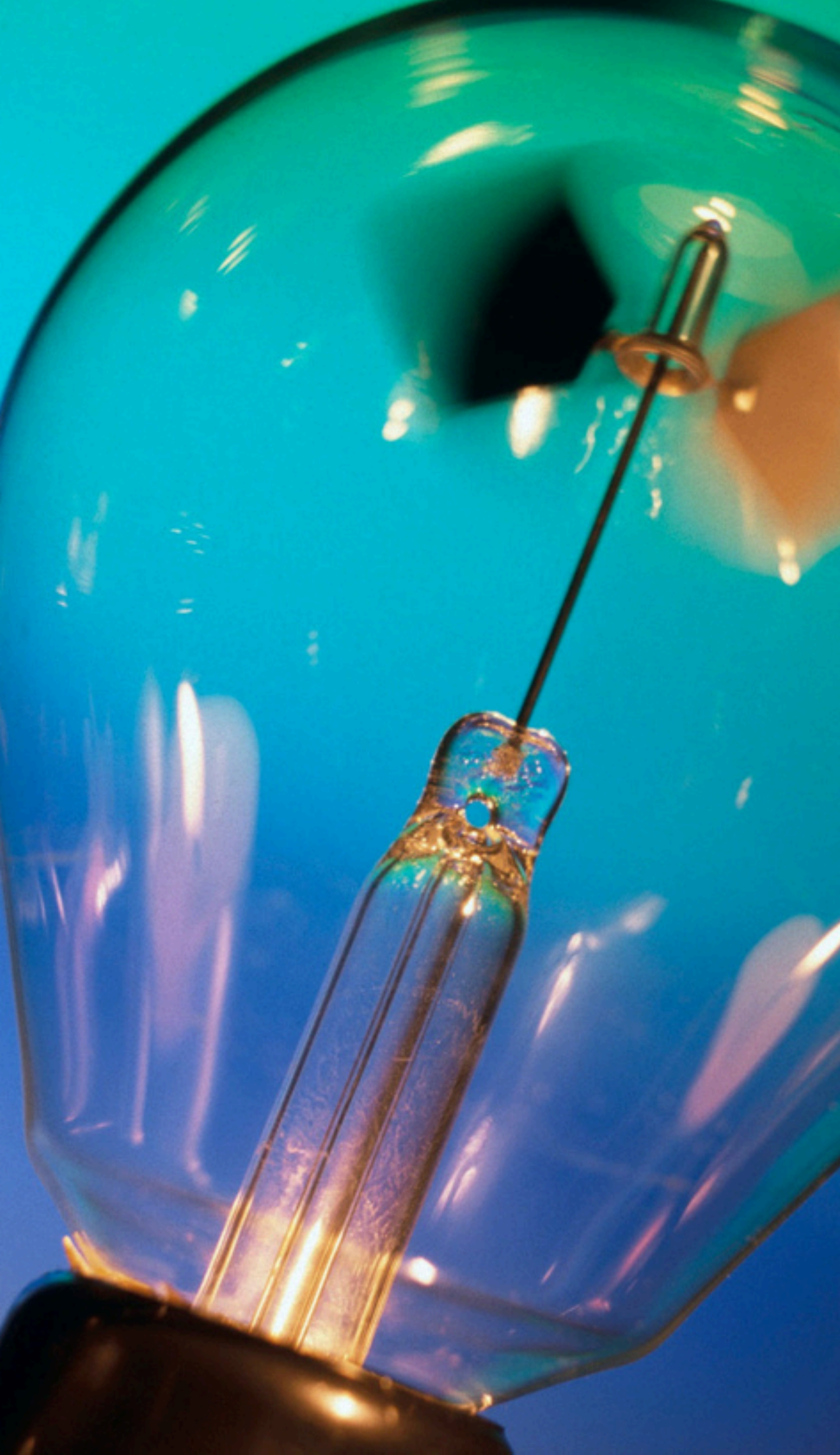
A Tribally Co-Designed

Low-Voltage Pre-Apprenticeship Program

Summer 2025-Fall 2026

Tribally Co-Designed Workforce Development Program





Why Low-Voltage Electrician?

Because skilled trades — especially low-voltage electrical work — often have **high barriers to entry** for women, Tribal members, and other historically excluded groups. Without access, people are locked out of economic mobility, and we miss out on the rich perspectives and innovation these communities bring.

At the same time, the **electrical field is growing rapidly**, especially here in Northern California. There's rising demand for trained workers in both residential and commercial systems.

This program was built to **bridge that gap** — to connect Tribal members and others to **registered apprenticeships and careers** in a high-demand, high-skill industry.

INDUSTRY WORKFORCE OCCUPATIONS



- REMOTE MONITORING
SCADA TECHNICIANS
- PROTECTED SPECIES
OBSERVERS
- PROJECT ADMIN
IE. LOGISTICS
- ELECTRICIANS - LOW VOLT
- ELECTRICIANS - MED VOLT
- ELECTRICIANS - HIGH VOLT
- ENVIRONMENTAL SCIENCE
& DATA TECHNICIANS
- STRATEGIC PLANNERS
- WELDERS
- MARINE EXPERTISE
IE. BOAT CAPTAIN
- MARINE TECHNICIANS



- PROJECT MANAGERS
- PROJECT ADMIN
- SPLICERS
- FIBER TECHNICIANS
- ELECTRICIANS - LOW VOLT
- CONTROLS SYSTEMS TECHNICIANS
- IT TECHNICIANS



- FINANCIAL MANAGERS •
- FINANCIAL ADMIN •
- GRANT MANAGERS •
- GRANT ADMIN •
- CARBON EMISSION
ACCOUNTING ADMIN •
- DATA MANAGERS •
- DATA TECHNICIANS •
IE. GIS
- PROJECT MANAGERS •
- EQUIPMENT OPERATORS •
TRENCHERS / FORKLIFT •
- ELECTRICIANS - LOW VOLT •
- WATER / WASTEWATER •
SYSTEM MANAGERS
SYSTEM TECHNICIANS
- MICRO GRID INSTALLERS/M&O •



OFFSHORE
WIND



MICRO
GRID



PUBLIC
UTILITIES



BROADBAND
BUILDOUT

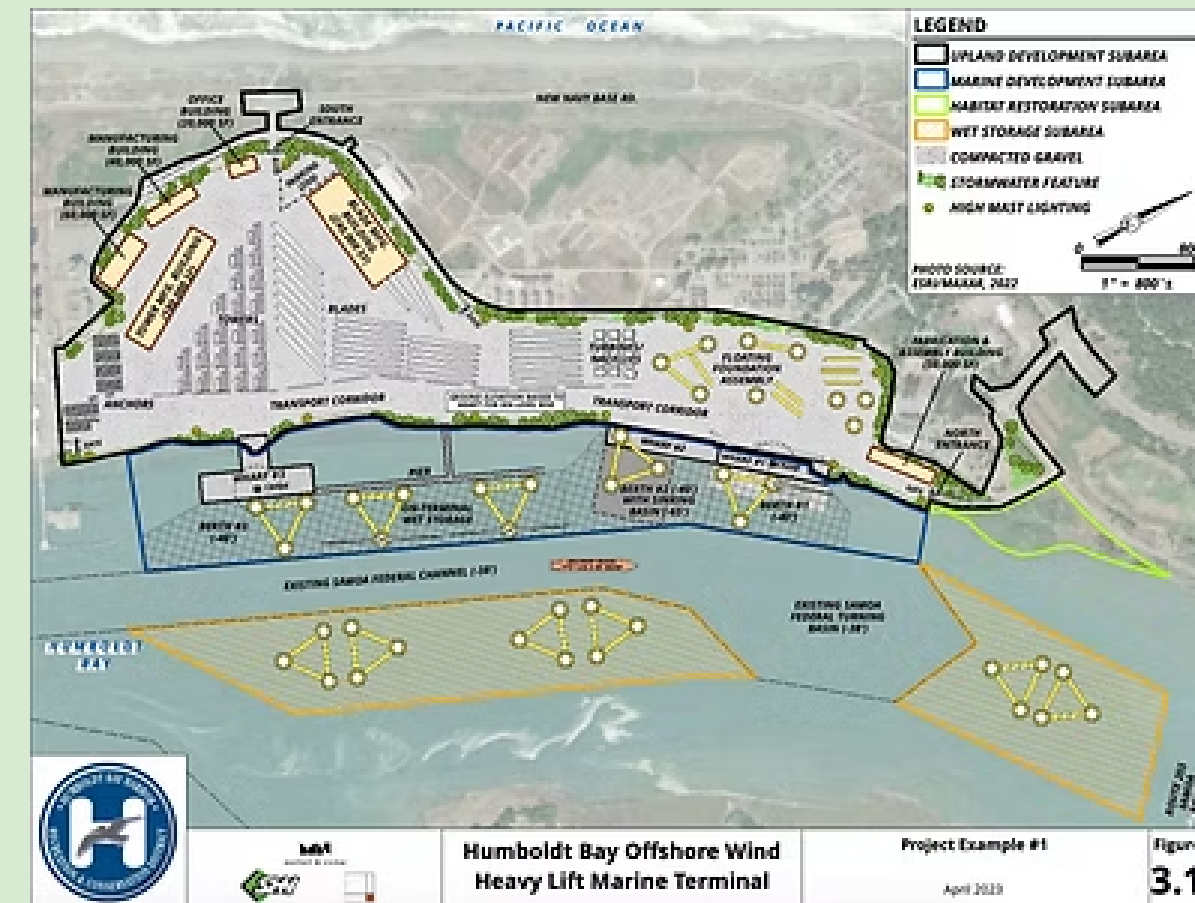
CLIMATE RESILIENCE

TRIBAL APPRENTICESHIP OPPORTUNITIES

- ENERGY & INFRASTRUCTURE -

Possible Offshore Wind Industry

- Offshore Wind Turbine O&M
- Transmission (High Voltage)
- Heavy Lift Marine Terminal O&M

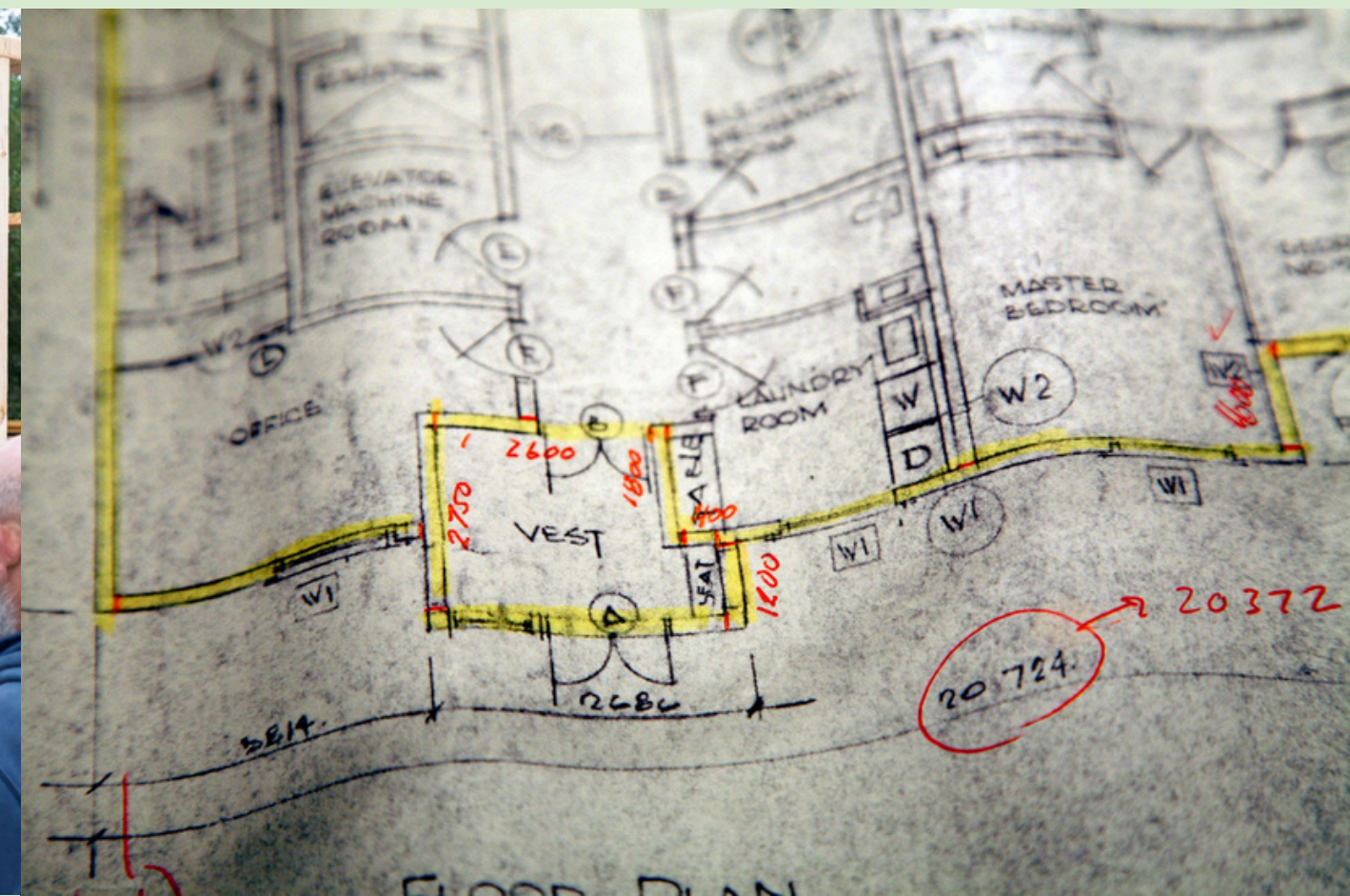


Program Highlights:

- Four-week-48 hour hybrid course
- Culminating In-Person/
- Hands-On Session
- \$5,000 Completer Stipend

- 62 Applicants (ages 18-52)
- 25 Selected
- 25 Completed (100%)
- 12 Women
- 24 Tribal Affiliations
- (Yurok, Karuk, Hoopa, Big Lagoon)

- Construction Math and Measurement
- Electrical Drawings
- Working With and For Tribes
- TERO's (ongoing)
- Soft Skills
- Intro to Power Tools
- OSHA
- First Aid/CPR
- Resume and Job Search Support



An Introduction to Pathways to Trust: A Learning Journey Towards Equitable Tribal PartnershipsSM



Friday, May 8th



8:30 AM - 4:30 PM



Sapphire Palace,
Blue Lake Casino

Themes

- Tribal Sovereignty
- Tribal Experiences
- Cultural Awareness
- Tribal Panel sharing
- Lived Experiences
- Tribal Self-Determination
- Tribal Cultural Landscape Assessment

Pathways to TrustSM is a comprehensive professional development curriculum designed to prepare individuals and organizations to build effective, respectful partnerships with Tribal Nations.

Developed by the Alliance for Tribal Clean Energy, this program addresses the critical knowledge gaps that often undermine cross-cultural collaboration and provides tactical frameworks for successful government-to-government relations.

Lunch provided

Register Here

Book a Room



<https://web.cvent.com/event/5e3b5d23-50b7-4134-ae78-984fff9a09d6/register>



<https://bookings.bluelakecasino.com/search-rates>

Registration Fees

Developers/Corporations: \$200.00

Government Entities: \$100.00

Nonprofits/Environmental Justice Groups: \$50.00

Students, Faculty, Tribal Members/Staff: \$0.00



ALLIANCE
FOR TRIBAL CLEAN ENERGY

Pathways to Trust Training

Offered by BLR, Alliance for Tribal Clean Energy, and NREN







Ta'm Resilience Campus: A Strategic Investment for Economic Development

The Ta'm Resilience Campus, spearheaded by the Blue Lake Rancheria Tribe (Blue Lake, CA), presents a transformative opportunity for economic development and resilience-building within the Tribe and across the region. The summary below examines the strategic significance of the Ta'm and its potential to drive sustainable growth, innovation, and prosperity in the region—and serve as a model for the nation.





Thank You!



hguynup@bluelakerancheria-nsn.gov



Partnership Spotlight

Sierra Business Council (SBC) & Sierra Energy ReImagined (SERi)

Expanding community outreach and energy equity through trusted local engagement.





Hilary Quinn

Senior Program Manager

Sierra Business Council



Jan Maes

Executive Director

Sierra Energy ReImagined



Sierra Energy Reimagined

- CBO in Nevada County established as 501c3 in 2024
- Focus on energy efficiency and electrification of homes
- County Climate Plan in development: GHG inventory shows 67% transportation GHG and 17% Residential Buildings.
- Context: rural, hard-to-reach (HTR), aging population (and housing stock!), extreme high fire risk, frequent power outages, huge affordability challenges (energy and fire insurance)



Emphasis on Affordability

Energy Conservation

Energy Efficiency

Electrification

Renewable energy

Free	++
Affordable	++
Expensive	+++
Expensive	++++



Home Energy Wise Program



- Newsletter and website
- Home Energy Wise Workshops



- Access to Rebates and programs
- Home Energy Wise Coach Visits

California Climate and Energy Forum 2026:
Community & Tribal Partnerships in Rural Northern California



\$avings

From reduced energy bills



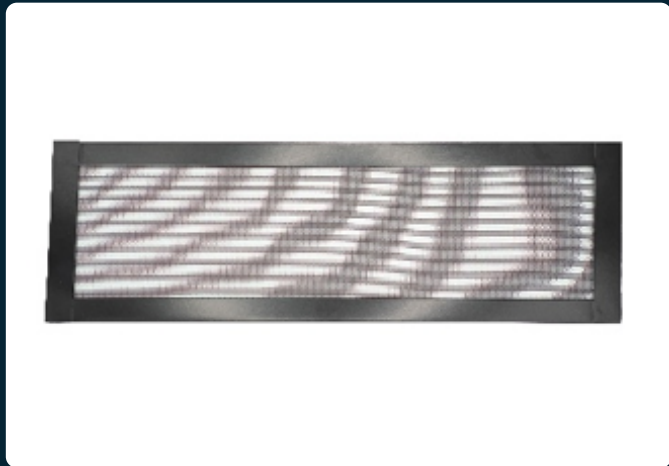
Lower Footprint

Lower Carbon Footprint



Resilience

High-heat events and
wildfire smoke



Wildfire Protection

Wildfire protection



Local Workforce

Workforce Development



NREN - SERi Partnership

EE kits featured in HEW Program

Benefits:

- Entry point for SERi and for NREN
- EE Kit = Incentive for home energy improvements
- (SERi) Financial support, capacity building, credibility
- (NREN) increased scale over large geographic area, local market intel, and program testing





SIERRA
BUSINESS COUNCIL



NREN - SERi Partnership Recommendations

- Partnerships to Build Capacity
- Work With Trusted Community Messengers
- Align Program Services
-





Jennifer Puser Brennan

Energy Program Manager

Lake Area Planning Council



Partnership Spotlight

Lake Area Planning Council

Works with public agencies to plan for and implement solutions to common community problems.





Reaching the Hard-to-Reach

Challenges in NREN Communities

- Rural Geography
- Lack of awareness of energy efficiency programs
- Limited or no EE program offerings in the past 20+ years
- Lack of trust in PG&E
- Lack of access to technology
- Lack of economic opportunities and funding for projects/rebates
- Very high energy burden in some areas





Reaching the Hard-to-Reach

Important Tactics

- Persistence
- Patience
- Engagement
- Expectations – know this is difficult, feel like a salesperson
- Go to where the people are
- Show up in the community – can't do all outreach from your desk!
- Listen to people who know the community
- Find the “champions” – could be elected officials, non-profits, community leaders and have them introduce you to their networks
- Get to know your audience
- Establish trust and always follow-up (more than once!)
- On-line technologies won't reach all people
- Low tech actions can produce results
- Join or create collaborative, community partnerships





Reaching the Hard-to-Reach

In-Person Outreach Strategies

- “EE Kit events” - Senior Centers, mobile home parks, HOAs, churches, veterans’ groups, CBOs
- Flyers - in food bank food boxes – step-by-step online instructions for EE kits
- Presentations - to all kinds of groups: elected officials, civic organizations, business luncheons/dinners,
- Tabling - community events of all kinds!
- Advertising - radio, public radio interviews, transit buses (shelters), digital, social media, targeted direct mail
- One-on-one meetings/meet and greets – establish relationships with community leaders



Panelists

*Please ask questions for the
panelists through the Whova App*



Heidi Moore-Guynup
Director of Tribal and Government
Affairs/Sustainability
Blue Lake Rancheria



Jan Maes
Executive Director
Sierra Energy Relmaged



Stephen Kullmann
Director of Customer Programs
Redwood Coast Energy Authority



Hilary Quinn
Senior Program Manager
Sierra Business Council



Jennifer Puser Brennan
Energy Program Manager
Lake Area Planning Council



Roundtable Discussion Prompt

What strategies, partnerships, or community-based approaches can help increase participation and impact in rural and underserved communities?

- Introduce yourself to others at your table
- Discuss ideas, challenges, and successful strategies together
- Write your ideas on sticky notes
- **Place sticky notes on the corresponding posterboard category:**
 - WET
 - Engaging Disinvested Populations
 - Partnership Opportunities



Thank You!