

### RED POWER ENERGY

# RED POWER ENERGY

## Tribal Energy Presentation



### RedPowerEnergy.com @RedPowerEnergy

# Table Of Contents



RED POWER PAST PERFORMANCE











#### Richard TallBear Westerman Chairman | Director Of Tribal Energy

855-573-3769 ext. 801

www.RedPowerEnergy.com Chairman@RedPowerEnergy.com

1887 Whitney Mesa Dr #8130 Henderson Nv 89014 RED POWER ENERGY

#### Eli Logan Vice-Chairman | Hopaii

855-573-3769 ext. 805

www.RedPowerEnergy.com Hopaii@RedPowerEnergy.com

1887 Whitney Mesa Dr #8130 Henderson Nv 89014



## **RED POWER IS DIFFERENT**

Red Power Energy Is A Native Owned Renewable Energy And Technology Company Focused on Native American Sovereignty And Economic Empowerment. On behalf of our clients, we harness renewable energy sources, improve energy sovereignty, and create sustainable economic opportunities. Our ROI First approach is a simple and transparent process of service to the Nation. Our energy solutions are cost effective, efficient and backed by our team of experts 24/7. Red Power Energy's Team will engineer systems to meet any demand while tailoring our packages to your specific goals, location, budget, and environmental considerations.





Red Power Energy is a 100% Native Owned SMB based in Nevada. Our experts deploy 25+ years of strategic energy experience in infrastructure projects, solar, battery energy storage, and related optimizations.

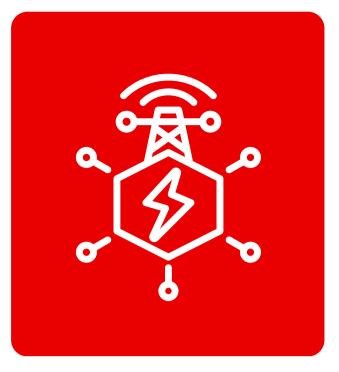
Red Power Energy currently has a core team of 8 energy experts in addition to technical subcontractors and partners.

Red Power energy provides expert solar energy and technology services for tribal nations, native consortiums, funding partners, PPPs and select partners serving ESG initiatives. We partner at any stage, to develop renewable energy for tribal, utility-scale, micro-grids, community residential solar, on site public buildings and gaming facilities from retro-fits and pre-development electrification with a commitment to tribal ownership of assets.

Red Power Energy provides scalable, end to end support and services exclusively to tribal energy projects in North America.

We <u>act in partnership with our tribal clients</u>, funding partners, regulatory agencies and other stakeholder to discovery, develop, fund and execute solar energy strategies and projects to unlock tribal resources with tribal owned assets.

The experts at Red Power Energy provides long term energy management services in a hybrid partnership/representation model focused on developing turn-key renewable energy solutions that generate revenue, build security and generational empowerment.





STRATEGY

# RED POWER **ENERGY**

**LEADERSHIP** 

### **Richard TallBear** Westerman

Chairman Director | Tribal Energy

**(**\$) RED POWER ENERGY

855-573-3769 Ext 801

### **Tribal Energy**

Hopaii Director |Strategy

Eli Logan





### LeeAnn TallBear

Advisor Director | Funding

**(**\$) **RED POWER** ENERGY

855-573-3769 Ext 803

### FUNDING

855-573-3769 Ext 805



### **Beth Lahaie**

Advisor Director | Partnerships

**(**\$)

RED POWER

ENERGY

855-573-3769 Ext 806

### PARTNERSHIPS



Partner Director | Marketing



# RED POWER **ENERGY LEADERSHIP**



### MARKETING



### Castleigh Jahnson

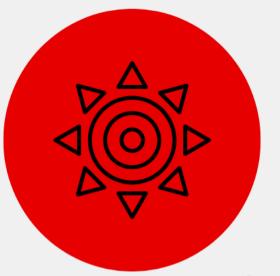
Advisor Director | Risk Mgt

(\$) RED POWER ENERGY

855-573-3769 Ext 804

### RISK MANAGEMENT

855-573-3769 Ext 809



### Winston Worth

Advisor

Director | Tribal Projects

**(**\$) RED POWER ENERGY

RED

POWER

**ENERGY** 

**LEADERSHIP** 

855-573-3769 Ext 801

### PROJECT MANAGEMENT

**RED POWER** ENERGY



### TECHNOLOGY



greenko

**Development & Funding** 



855-573-3769 Ext 802

### DEVELOPMENT AND FUNDING

855-573-3769 Ext 800

### **Richard TallBear Westerman**

### THE CHAIRMAN DIRECTOR | TRIBAL ENERGY

Richard TallBear Westerman is the *majority owner (51%) of the Tallbear* Seville Solar Project and (49%) Duke Energy one of the largest utility companies in the country. He holds a Federal Energy Regulatory Commission (FERC) license, which allows him to buy and sell energy on the national grid. Richard is responsible for the daily business management of the solar generation facility ensuring the successful operation and contribution to renewable energy initiatives.

#### 1. Energy Sector:

- Majority owner (51%) of the Tallbear Seville Solar Project
- 49% ownership in Duke Energy
- Holds a Federal Energy Regulatory Commission (FERC) license
- Manages a 250-acre, 20-megawatt solar array facility in Brawley, CA
- 2. Native American Business Leadership:

- Named to the top 40 under 40 native business people by the National Center for American Indian Enterprise Development (NCAIED) in 2014

- Youngest person to become a board member of NCAIED

#### *3. Gaming Industry:*

- Highly respected businessman in the Native American gaming industry
- Co-founder of The Tall Bear Group, a joint venture with Lexington Theming & Fabrication

#### 4. Hemp and Cannabis:

- CEO of Red Crow Hemp, providing consulting services to Native American tribes
- Owner of Mountainhead Apothecary LLC, holding 4 South Dakota Medical Cannabis licenses
- Owner of Tall Bear Cannabis (TBC)

#### 5. Consulting Work:

- Assisted Flandreau Santee Sioux Tribe with hemp plan development
- Helped White Earth Nation start a medical marijuana program and hemp CBD business
- Developing hemp CBD farm and products for Meskwaki Nation
- Developing medical marijuana program for Sisseton Wahpeton Oyate

#### 6. Certifications and Recognitions:

- TallBear Seville LLC is a certified Disadvantaged Business Enterprise (DBE) by the California Department of Public Utilities Commission

Richard TallBear Westerman's profile showcases a diverse portfolio in energy, Native American business development, and the emerging cannabis industry, with a strong focus on tribal economic development and renewable energy initiatives. In 2014 he was named to the top 40 under 40 native business people by the National Center for American Indian Enterprise Development and then was the youngest person to become a member of the Board of Directors of the NCAIED as well.

### Eli Logan HOPAI DIRECTOR | STRATEGY

Eli "Hopaii" Logan is a co-owner(49%) of Red Power Energy LLC.

A Choctaw and Chickasaw Native American, Eli Logan is a prominent serial entrepreneur and business Gentleman with a wealth of experience in developing and managing large-scale enterprises.

Role: Eli plays a critical role in the strategic management and expansion of Red Power Energy LLC's portfolio, ensuring the company remains at the forefront of the renewable energy sector through innovative technology and sysyematic optimization of strategic sales and marketing processes.

#### 1. Career Overview:

- Award-winning neurodivergent serial entrepreneur with over 15 years of experience

- 2. Current Roles:
  - Hopaii (Vice-Chairman) at Red Power Energy (June 2024 Present)
  - Founder of Native Chaos Holdings LLC (March 2023 Present)
  - Managing Member at LF Partnership & Trust (October 2016 Present)
- 3.Key Achievements:

  - Known for strong sales and marketing skills, relationship building, and leadership
- Consulted with hundreds of entrepreneurs at various business stages 4. Native Chaos Holdings LLC Focus:

  - Services in fashion, renewable energy, cannabis, construction, and business services
- 5.LFP&T Role:
  - Managing intellectual properties, patent interests, and cutting-edge developments
  - Advising on startups, go-to-market strategies, funding, and exits
- 6. Previous Experience:
  - Founder and Strategist at L.O.G. Group (February 2009 April 2018)
  - development, marketing, and SaaS applications
- 7. Volunteer Work:
  - Judge and Mentor for various entrepreneurship competitions
  - Executive in Residence at Addison TreeHouse (August 2018 September 2019)
  - Board Member and fundraiser for multiple organizations
- 8. Skills and Expertise:
  - Grant writing, solar power, start-up consulting, and venture management
- Creative problem-solving and converting technical concepts into market messages 9.Patents:
  - Holds patents related to pulsation dampener technology

• Expertise in enterprise sales, marketing, and innovation across various industries • Successfully formed and operated 24 business units, resulting in over \$16.4 billion in economic impact for clients

• Managed growth, diversity, innovation, and adversity in simultaneous ventures for 15 years

• Empowering Native American communities through economic prosperity, cultural reform, and sovereignty • Advocacy for land rights, sustainable practices, women's resources, and cannabis reform

• Founded profitable ventures in energy, trade shows, non-destructive testing, motorsports, digital media, web

## Lee Ann TallBear

## Advisor

Lee Ann TallBear is a highly skilled grant writer and program developer with over forty years of experience working with tribal governments, urban Indian non-profits, and national advocacy organizations. Her extensive strategic planning, organizational development, and fundraising background have enabled her to secure millions of dollars in funding across various sectors.

1. Career Span: Over 40 years of experience in grant writing and program development for tribal governments, urban Indian non-profits, and national advocacy organizations.

2. Early Career: Started at Red School House in Saint Paul, MN, in the early 1970s, securing millions in grants for culture-based education programs.

- 3. Housing Initiatives:
  - Established the Saint Paul Inter-Tribal Housing Board

seniors

4. Education: Secured funding to establish Tiospa Zina Tribal School for the Sisseton Wahpeton Oyate.

- 5. Political Involvement:
  - National Native vote director for Jesse Jackson's 1988 presidential campaign
  - Political staffer at the Democratic National Committee

6. National Roles:

- Fellowship at MIT's Department of Urban Studies and Planning
- Executive Director of the National Urban Indian Council
- National Outreach Coordinator at ITVS

- Won a landmark case against HUD (St. Paul Inter-Tribal Housing Board v. Reynolds, 1983) - Raised over a million dollars for family housing and created Elders Lodge for urban Indian

## Lee Ann TallBear

Advisor DIRECTOR | GRANT-WRITING

Lee Ann TallBear is a highly skilled grant writer and program developer with over forty years of experience working with tribal governments, urban Indian non-profits, and national advocacy organizations. Her extensive strategic planning, organizational development, and fundraising background have enabled her to secure millions of dollars in funding across various sectors.

### Continued

- 7. Business Ventures:
- Founded Red Nation Consulting, a grant writing and strategic planning business
- Her son, Richard TallBear-Westerman, created Red Nation Gaming
- 8. Tribal Development:
- Planning & Economic Development Director for Sisseton Wahpeton Oyate
- Economic Development Director for Meskwaki Nation
- Tribal administrator and consultant for California tribes
- 9. Notable Projects:
- Secured a \$210 million Clean Renewable Energy Bond allocation (not pursued)
- to over \$10 million
- Led the Dakota Industrial Hemp feasibility project in 2017

10. Recent Work:

- Continues to write successful grants for various tribes

systems

Throughout her career, LeeAnn TallBear has consistently focused on empowering Native American communities through strategic planning, fundraising, and community-driven development projects.

- Developed a truck plaza for Meskwaki Nation, increasing annual revenue from \$1 million

- Working with Sisseton Wahpeton College on grant development and management

### OUR PAST PERFORMANCE

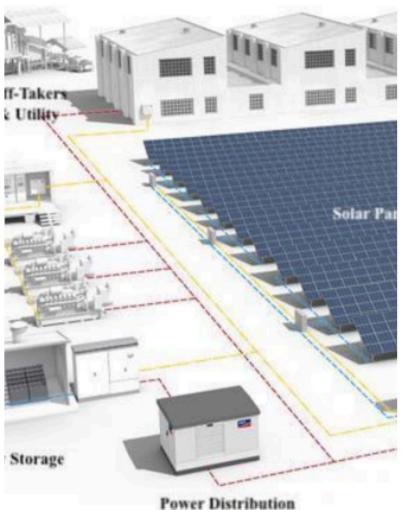


### **RED POWER** ENERGY









& Transformers

#### Dakota TALLBEAR SEVILLE Power 200 AC SOLAR FARM CURRENTLY OPERATING GENERATOR POWER \*



HYBRID SOLAR +

### Tonoho O'odham 1.5 MW SYSTEM PROPOSED

### TALLBEAR SEVILLE CURRENTLY OPERATING



TallBear Seville Project: 20MW Project Components 1.Solar PV Arrays: Type: Canadian Solar Maxpower 1500 V CS6U-330 M panels. Quantity: 3,788 panels. Capacity: 20 MW. Mounting System: Screwtype mounts designed for local environmental conditions. 2.Industrial Inverters: Type: Schneider Electric Conext SmartGen 1.25 MW. Efficiency: 98.6%. 3.Energy Storage System (ESS): Type: Li-ion battery-based storage. Capacity: 550 kWh. 4.Propane Generators: Type: Cummins Quiet Connect Series RS50 50 kW. Function: Backup power during low solar production. 5.SCADA System: Type: GreenPowerMonitor.

### THE FUTURE

DAKOTA ADMINISTRATION IN PROGRESS



Hybrid energy system for the Dakota

- Administration:
  - 1.System components:
    - 1.25 MW Solar PV system with 3788
      - Canadian Solar panels []
    - 0.55 MWh Li-ion battery storage system
- 2.Key features:
  - Designed to meet annual energy
    - consumption needs

  - Battery storage for time-shifting power
    - and stabilizing frequency
  - Propane generators for emergency
- 3. Additional components:
  - Schneider Electric inverter
  - SMA MV Block transformer
  - GreenPowerMonitor SCADA system for
    - monitoring and control
- 4. The system aims to make the Dakota Sioux

- 100 kW propane backup generators (2 x
  - 50 kW Cummins units)

- 84% consumption of PV-produced power,
  - indicating high efficiency

backup

### FUTURE DAKOTA ADMINISTRATION IN PROGRESS

- Solar PV System:
  - 1.8 million kWh annual energy production
  - Based on 1424 kWh/kWp, 4.88 hours of peak sunlight per dav
  - 80% conservative system efficiency
- Battery Storage System:
  - 550 kWh li-ion based system
  - Composed of 11 x 50 kWh battery pods
  - Designed to store 100% of the year's excess energy (200,308 kWh)
  - Over 6,000 cycle performance at 100% depth of discharge
- Propane Generators:
  - Two Cummins Quiet Connect Series RS50 50kW units
  - 4,000-liter propane fuel tank per unit (15-day capacity at 100% operation)
  - Estimated operating cost of \$0.145 per kWh
- Control Systems:
  - SMA Fuel Save Controller (FSC) for managing power sources
  - GreenPowerMonitor SCADA system for monitoring, control, and asset management
  - Provides real-time data, automatic reporting, and maintenance scheduling



Additional Infrastructure:

- Single bay substation upgrade included
- 100 m of internal transmission line and towers
- Security fencing and CCTV camera system
- Weather station
- Environmental and Economic Benefits:
  - Maximizes solar energy utilization
  - Reduces reliance on traditional utility grid
  - diesel
  - cost savings

This hybrid system represents a comprehensive approach to sustainable energy production and management for the Dakota Sioux Casino complex, combining renewable energy, storage, and backup power solutions.

Propane generators offer cleaner emissions compared to

System designed for efficient energy management and



OUR POWER IS NATIVE **RED POWER ENERGY LLC IS** A RESULTS ORIENTED NATIVE OWNED ENERGY **DEVELOPMENT FIRM THAT** ALIGNS WITH TRIBES WITH A **PROPRIETARY HYBRID** OWNERS REP MODEL THAT **ALWAYS ALIGNS US WITH** OUR TRIBAL CLIENTS. NOT AGAINST.

#### **Barriers to Development:**

Despite the high potential for solar energy on Native American lands, several barriers hinder the development of these projects including regulatory challenges, funding limitations, and the need for technical expertise. Addressing these barriers is crucial for unlocking the full potential of solar energy on tribal lands





Red Power Energy, led by the dynamic TallBear family and Eli Logan, is at the forefront of Native American economic empowerment and sovereignty. Our leadership team brings over 65 years of combined experience in tribal development, renewable energy, and strategic planning. Key Team Members:

1.Lee Ann TallBear: With 40+ years of experience, Lee Ann is our grant writing and program development expert.

- Secured millions in grants for tribal education and housing initiatives
- Led projects increasing tribal revenues from \$1 million to \$10+ million annually
- Spearheaded the \$210 million Clean Renewable Energy Bond allocation
- 2.*Richard TallBear Westerman*: A recognized leader in renewable energy and tribal economic development.
  - Majority owner of a 20MW solar array facility in California
  - Built 28 Native American casino and hotel developments
  - Named in the Top 40 Under 40 Native Business People
- 3. Eli Logan: A serial guerrilla entrepreneur with 15+ years of experience in enterprises, tribal and innovation.
  - impact
  - strategy
  - Founded Native Chaos Holdings LLC, driving growth in diverse sectors for Native American communities



• Successfully formed and operated 24 business units, generating over \$16.4 billion in economic

• Expertise spans fashion, cannabis, solar, business services, event management, and marketing



The experts at Red Power Energy provides long term energy management services in a hybrid partnership/representation model focused on developing turn-key renewable energy solutions that generate revenue, build security and generational empowerment.

Our ROI First approach is a simple and transparent process of service to the Nation. Red Power Energy's Team will engineer systems to meet any demand while tailoring our packages to your specific goals, location, budget, and environmental considerations.

# Working With Native America

Our Expertise:

- projects.
- and IPP formation.
- cultivation to distribution strategies.
- Construction and Development: 28 successful casino projects completed.
- Fashion and Retail: Developing Native-owned brands and market strategies.
- native owned business and tribal enterprises.
- Event Management: Expertise in planning and executing large-scale events to promote tribal businesses and culture.

Red Power Energy is committed to driving sustainable economic growth, with a track record of increasing tribal revenues by 1000% in select projects. Our holistic approach encompasses energy sovereignty, cultural preservation, and innovative business solutions across multiple industries. Our team's combined experience ensures a comprehensive understanding of tribal needs, from grassroots community development to large-scale energy projects and cutting-edge business ventures. We leverage our diverse skillsets to create tailored strategies that respect traditional values while embracing modern economic opportunities.

• Grant Writing and Funding Management: We've secured over \$200 million in funding for tribal

• Renewable Energy: Managing 20+ MW of solar power, with expertise in utility authority creation

• Cannabis and Hemp: Consulting for tribes entering this high-growth market, with comprehensive

• Business Services: Offering legal, tax, accounting, sales, marketing, and HR solutions tailored for



Red Power Energy

### is dedicated to

### RED POWER ESG, DEI and community engagement. ENERGY

ESG, DEI, and Community Engagement:

Red Power Energy is committed to Environmental, Social, and Governance (ESG) standards and Diversity, Equity, and Inclusion (DEI) initiatives in all aspects of our work. We don't just talk about diversity—we live it, with a team and leadership that reflects the communities we serve.

Minority-Owned Business Focus:

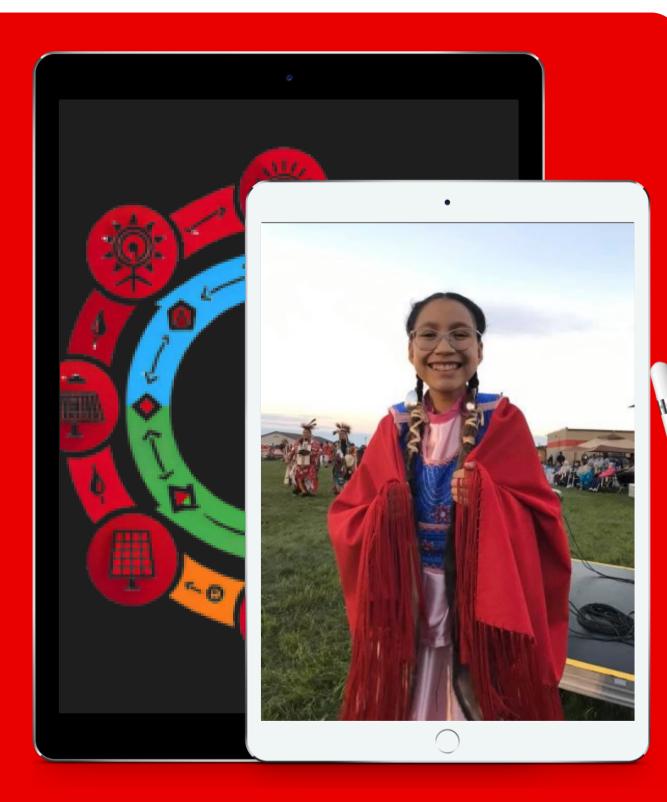
As a Native American-owned company, we understand the challenges faced by minority businesses. That's why we actively seek out minority-owned subcontractors and partners, ensuring that our projects create opportunities for businesses facing similar challenges.

Community Impact:

- Job Training and Local Hiring: We prioritize hiring local talent from the communities we work in, offering job training and internships to help individuals gain valuable skills in the renewable energy industry.
- Internship Programs: We offer internships and apprenticeships in the renewable energy sector, providing hands-on experience in energy project development, management, and maintenance.

Long-Term Benefits:

- Economic Uplift: Our projects are designed to uplift communities by creating jobs and supporting local businesses.
- Environmental Justice: By deploying renewable energy in underserved communities, we help reduce their carbon footprint and improve access to clean energy solutions.



#### Vision:

Red Power Energy envisions a swift and equitable transition to renewable energy that benefits all, especially underserved communities .

**Recognition:** 

We acknowledge that marginalized communities, particularly Native American tribes, bear disproportionate burdens of environmental injustice and climate change.

#### Commitment to Equity:

Advancing equity within our organization and the broader energy sector Addressing systemic inequities in energy access and opportunities Amplifying voices of the communities we serve Action and Accountability: Implementing targeted programs for underserved communities Regularly assessing and reporting on our equity initiatives Collaborating with community partners

to ensure our efforts align with local needs

**Diversity and Representation:** Building a diverse workforce that reflects the communities we serve Focusing on representation in leadership positions Promoting diversity in race, gender, CHANGE LOADING background, and experience

Inclusive Environment: Fostering welcoming spaces in all our operations Ensuring all stakeholders are heard, supported, and valued Promoting inclusive practices in the renewable energy industry



### BETTER OUTCOMES FOR ALL LOADED...



### **Residential Solar Systems**

### **Current Options**

Туре	System Size	Price Range	Total Cost	Components
Rooftop solar panel arrays	3 kW to 20 kW	\$2.50 - \$3.50 per watt installed	\$7,500 - \$70,000	Monocrystalline panels (400 String inverters or microinve Roof mounting system Monitoring system
Building-integrated photovoltaics (BIPV)	4 kW to 15 kW	\$4.00 - \$6.00 per watt installed	\$16,000 - \$90,000	Solar roof tiles or solar shing Power optimizers Specialized inverters Integrated monitoring system
Ground-mounted solar arrays for larger properties	5 kW to 25 kW	\$2.75 - \$3.75 per watt installed	\$13,750 - \$93,750	High-efficiency monocrysta Central string inverter or mu Ground mounting system (fi tracking) Fencing and security system
Solar awnings and canopies	2 kW to 10 kW	\$3.50 - \$5.00 per watt installed	\$7,000 - \$50,000	Specialized solar panels for Microinverters or power opt Custom mounting structures Integrated lighting systems

#### 00-450W each) verters

ngles

em

talline panels nultiple string inverters (fixed-tilt or single-axis

ems

or awning integration otimizers es





### **Commercial Solar Systems**

### **Current Options**

Туре	System Size	Price Range	Total Cost	Components
Rooftop solar installations	50 kW to 1 MW	\$1.75 - \$2.75 per watt installed	\$87,500 - \$2,750,000	High-efficiency mon Multiple string invert Ballasted mounting s Advanced monitorin
Carport solar canopies	100 kW to 2 MW	\$2.25 - \$3.25 per watt installed	\$225,000 - \$6,500,000	Specialized solar par Central inverters with Custom steel structu EV charging integrat Lighting and drainag
Building-integrated photovoltaics (BIPV)	20 kW to 500 kW	\$3.50 - \$5.50 per watt installed	\$70,000 - \$2,750,000	Solar facades or cur Specialized inverters Custom mounting ar Building managemer
Ground-mounted solar arrays	250 kW to 5 MW	\$1.50 - \$2.50 per watt installed	\$375,000 - \$12,500,000	Large-scale solar pa Central inverters or s Fixed-tilt or single-a Substation and grid

onocrystalline panels erters or central inverters g systems for flat roofs ing and control systems

anels for carport integration /ith transformer tures

ation

age systems

urtain walls ers and power optimizers and integration systems ent system integration

oanels (400W+) r string inverters axis tracking systems d interconnection equipment



#### RED POWER ENERGY

### Industrial Solar Systems

### Current Options

Туре	System Size	Price Range	Total Cost	Components
Large-scale rooftop installations	500 kW to 5 MW	\$1.40 - \$2.20 per watt installed	\$700,000 - \$11,000,000	High-efficiency solar panels Multiple central inverters Structural reinforcement for he Advanced monitoring and con
Ground-mounted solar farms	1 MW to 50 MW	\$1.20 - \$2.00 per watt installed	\$1,200,000 - \$100,000,000	Utility-scale solar panels Central inverter stations Single-axis or dual-axis tracki Substation and grid interconne equipment
Solar thermal for industrial processes	100 kW to 10 MW (thermal)	\$1.50 - \$3.00 per watt thermal	\$150,000 - \$30,000,000	Solar thermal collectors (flat p evacuated tube) Thermal storage tanks Heat exchangers and distribut Process integration equipmen
Combined heat and power (CHP) solar systems	250 kW to 5 MW	\$2.00 - \$3.50 per watt installed	\$500,000 - \$17,500,000	PV panels and inverters Waste heat recovery systems Thermal storage CHP engines or turbines Control and integration system

heavy loads ontrol systems

king systems nection

plate or

ution systems ent

ems





### Utility Scale Solar Systems

### Current Options

Туре	System Size	Price Range	Total Cost	Components
Large ground-mounted solar farms	1 MW to 1 GW	\$0.80 - \$1.50 per watt installed	\$8,000,000 - \$1,500,000,000	Utility-scale solar par Central inverter station Medium-voltage trans Substation and trans SCADA and grid man
Single-axis tracking systems	20 MW to 1 GW	\$0.90 - \$1.60 per watt installed	\$18,000,000 - \$1,600,000,000	Tracking-optimized s Single-axis trackers Central inverters with Advanced tracking c Grid interconnection
Fixed-tilt solar arrays	10 MW to 500 MW	\$0.75 - \$1.40 per watt installed	\$7,500,000 - \$700,000,000	High-efficiency solar Fixed-tilt racking sys Central inverter station Substation and trans Monitoring and contr
Concentrating solar power (CSP) plants	50 MW to 250 MW	\$3.50 - \$6.00 per watt installed	\$175,000,000 - \$1,500,000,000	Solar field (heliostats troughs) Central receiver towe Thermal energy stora Power block (turbine Water treatment and

#### anels (400W+) tions ansformers ismission equipment anagement systems

solar panels

ith transformer control systems

n equipment

ar panels

/stems tions

ismission equipment

trol systems

ts or parabolic

/er

orage system

ne and generator)

d cooling systems



#### RED POWER ENERGY



### Utility Scale Solar Systems

### Current Options

Туре	System Size	Price Range	Total Cost	Components
Large ground-mounted solar farms	1 MW to 1 GW	\$0.80 - <b>\$1.5</b> 0 per watt installed	\$8,000,000 - \$1,500,000,000	Utility-scale solar pane Central inverter station Medium-voltage transf Substation and transm SCADA and grid manag
Single-axis tracking systems	20 MW to 1 GW	\$0.90 - \$1.60 per watt installed	\$18,000,000 - \$1,600,000,000	Tracking-optimized so Single-axis trackers Central inverters with t Advanced tracking cor Grid interconnection ed
Fixed-tilt solar arrays	10 MW to 500 MW	\$0.75 - \$1.40 per watt installed	\$7,500,000 - \$700,000,000	High-efficiency solar p Fixed-tilt racking syste Central inverter station Substation and transm Monitoring and control
Concentrating solar power (CSP) plants	50 MW to 250 MW	\$3.50 - \$6.00 per watt installed	\$175,000,000 - \$1,500,000,000	Solar field (heliostats of troughs) Central receiver tower Thermal energy storag Power block (turbine a Water treatment and co

#### nels (400W+) ons sformers mission equipment agement systems

olar panels

transformer ontrol systems equipment

panels tems ons mission equipment ol systems

or parabolic

ige system

and generator)

cooling systems



#### RED POWER ENERGY

Partners With Tribal Leadership, Funding Partners And Select Agencies To Develop And Execute Energy Strategies From Feasibility To Decommissioning.



#### Tribal Micro-Grids

Empower your tribal community with Red Power Energy's cutting-edge solar microgrid solutions. Sustainable, reliable, and culturally sensitive energy independence for Native American communities.



#### Tribal Revenue Generation

Unleash your tribe's potential with Red Power Energy's cutting-edge solar micro-grids, utility authorities, IPP services, and virtual energy offices. Achieve energy sovereignty, generate sustainable revenue, and lead your community towards a prosperous, selfdetermined future.



#### Tribal Residential Solar

Embrace energy sovereignty with Red Power Energy's custom-designed Tribal Residential Solar solutions. Sustainable, culturally sensitive, and cost-effective solar systems tailored for Native American homes.



#### Tribal Utility Authority Formation Services

Expert guidance for Tribal Utility Authority Formation from Red Power Energy. Empower your tribe with energy sovereignty, economic growth, and sustainable infrastructure. Comprehensive support from initial planning to long•term implementation and beyond.



#### Tribal IPP Formation Service

Our comprehensive suite of services is tailored to help tribal communities harness their abundant natural resources, generate clean, renewable energy, and create sustainable economic opportunities that benefit generations to come.



#### **Tribal Electrification**

Our team of experts works closely with tribal leaders and community members to develop tailored electrification strategies that respect traditional practices while embracing innovative technologies. This collaborative approach ensures that our solutions are not only technically sound but also culturally appropriate and community-driven.







#### Virtual Energy Office

Discover Red Power Energy's Virtual Tribal Energy Office – your comprehensive online hub for sustainable, culturally-sensitive energy solutions. Empower your indigenous community with cutting-edge technology and traditional wisdom. Start your journey to energy sovereignty today.



#### Grant-Writing & Management

At Red Power Energy, we understand that securing funding is often the most challenging aspect of implementing solar micro grid projects in tribal communities. Our dedicated funding and grant-writing services are designed to overcome these hurdles, enabling Native American tribes to achieve energy independence through innovative solar solutions.



#### **Project Turn-Around**

Revitalize tribal solar assets with Red Power Energy's specialized turn around services. Expert assessment, culturally sensitive optimization, and sustainable management for true energy sovereignty and maximized ROI.







#### Solar Power for Tribal Facilities

F5 BR

#### Solar PV Systems for Government Buildings

Design: A 100 kW rooftop solar PV system.

**Components:** 300 × 330W panels, 2 × 50 kW inverters, custom roof mounts, wiring, electrical components, monitoring system.

Total Cost: \$150,000

Annual Energy Production: 140,000 kWh

Payback Period: ~10.7 years

#### Solar Water Heating for Tribal Facilities

Design: Solar thermal system for a community center.

**Components:** 10 flat-plate collectors, 1,000-gallon storage tank, heat exchanger, pumps, controls.

F] 19

Total Cost: \$55,000

Annual Savings: \$5,000

Payback Period: 11 years

#### Solar Parking Lot Canopies

Design: 200 kW solar canopy over parking lot.

**Components:** 600 × 330W panels, steel canopy structure, 4 × 50 kW inverters, electrical wiring, monitoring system.

Total Cost: \$420,000

Annual Energy Production: 280,000 kWh

Payback Period: ~12 years

#### Solar-Powered LED Lighting

Design: Solar street lighting for a 2-mile road.

**Components:** 40 units of solar LED lights, 10 kWh battery storage per light, 200W solar panels per light, poles, and mounting.

Total Cost: \$140,000

Annual Savings: \$10,000

Payback Period: 14 years





#### **Tribal Housing and Community Solar Initiatives**

F0 15

### Residential Solar PV Systems

Design: 5 kW rooftop solar system for individual homes.

**Components:** 15 × 330W panels, 1 × 5 kW inverter, mounting, wiring.

Total Cost: \$8,000

Annual Energy Production: 7,000 kWh

Payback Period: ~11.4 years

#### Community Solar Projects

Design: 1 MW solar farm shared by 100 households.

**Components:** 3,030 × 330W panels, 20 × 50 kW inverters, mounting systems, monitoring system.

Total Cost: \$2,000,000

Annual Energy Production: 1,400,000 kWh

Payback Period: ~10 years

### Solar Water Heaters for B Homes

Design: Solar water heating system for a 4-person household.

**Components:** 1 flat-plate collector, 80-gallon storage tank, heat exchanger.

Total Cost: \$5,000

Annual Savings: \$500

Payback Period: 10 years

## Solar Battery Storage for The Homes

**Design:** 10 kWh battery storage paired with a 5 kW solar system.

**Components:** 10 kWh lithium-ion battery, inverter, charger, 15 × 330W solar panels.

Total Cost: \$14,000

Annual Savings: \$1,000

Backup Power: ~2 days of critical load support





Solar for Revenue Generation and Economic Development

53

FZ

#### Utility-Scale Solar Farms

Design: 5 MW solar farm generating power for sale to the grid.

**Components:** 15,150 × 330W panels, 100 × 50 kW inverters, mounting structures, tracking systems, substation, grid connection.

Total Cost: \$16,500,000

Annual Energy Production: 7,000,000 kWh

Revenue from Power Sales: \$700,000/year

## Solar Energy Export

#### Programs

**Design:** 2 MW solar system with PPA to export energy to neighboring communities.

**Components:** 6,060 × 330W panels, 40 × 50 kW inverters, 2 MWh battery storage, grid connection, export infrastructure.

Total Cost: \$6,000,000

Annual Energy Production: 2,800,000 kWh

Revenue from PPA: \$280,000/year

#### Solar-Powered Manufacturing Facilities

**Design:** 500 kW solar system powering a tribal manufacturing facility.

**Components:** 1,515 × 330W panels, 10 × 50 kW inverters, 500 kWh battery storage, manufacturing equipment integration.

Total Cost: \$1,750,000

Annual Savings: \$200,000

Increased Manufacturing Efficiency: \$300,000/year

#### Solar-Powered Data Mining<sup>II</sup> Operations

**Design:** 1 MW solar system powering cryptocurrency mining servers.

**Components:** 3,030 × 330W panels, 20 × 50 kW inverters, 1 MWh battery storage, data center cooling systems.

Total Cost: \$3,400,000

Annual Savings: \$250,000

Cryptocurrency Mining Revenue: \$1,000,000/year

### Solar-Powered Business

**Design:** 100 kW solar system supporting a business incubator facility.

**Components:** 300 × 330W panels, 2 × 50 kW inverters, 100 kWh battery storage, office and facility HVAC, lighting.

Total Cost: \$440,000

Annual Savings: \$30,000

Revenue from Incubated Businesses: \$100,000/year





#### Solar-Powered Fuel Offsets

Ęĉ

#### Solar-Powered Fuel Stations

**Design:** 100 kW solar system with EV charging stations at a fuel station.

**Components:** 300 × 330W panels, 2 × 50 kW inverters, 10 dualport EV charging stations.

Total Cost: \$300,000

Annual Savings: \$15,000

Additional Revenue from EV Charging: \$25,000/year

### Solar Charging for Electric

Design: 50 kW solar system dedicated to EV charging.

**Components:** 150 × 330W panels, 1 × 50 kW inverter, 5 dual-port EV charging stations.

Total Cost: \$150,000

Annual Savings: \$7,500

Additional Revenue from EV Charging: \$12,500/year

#### Solar-Powered Backup Systems

**Design:** 50 kW solar system paired with 100 kWh battery storage for backup power.

**Components:** 150 × 330W panels, 1 × 50 kW inverter, 100 kWh battery storage, control systems.

Total Cost: \$170,000

Annual Savings: \$15,000

Avoided Revenue Loss During Outages: \$10,000/year

### Solar-Powered Transport

**Design:** 100 kW solar system to power public transport electric buses.

**Components:** 300 × 330W panels, 2 × 50 kW inverters, EV bus charging infrastructure.

Total Cost: \$370,000

Annual Savings: \$50,000

Additional Revenue from EV Charging: \$20,000/year

### Solar for Diesel-Powered

**Design:** 200 kW solar system with 500 kWh battery storage to replace diesel.

**Components:** 606 × 330W panels, 4 × 50 kW inverters, 500 kWh battery storage, diesel generator integration system.

Total Cost: \$790,000

Annual Savings: \$70,000

Payback Period: ~11.3 years















### REDPOWERENERGY.COM

1887 Whitney Mesa DR <u>#8130</u> Henderson, NV 89014

### RED POWER ENERGY

# THANK5 OUR POWER IS NATIVE

@redpowerenergy

