



Office of
INDIAN ENERGY POLICY AND PROGRAM



Northern Cheyenne White River Community Solar Project

William WalksAlong, NC Tribal Administrator

Northern Cheyenne Tribe

In 1825 the Cheyenne tribe split into the Northern and Southern Cheyenne

Demographics:

- Located in present-day southeastern Montana
- 444,000 acres
- 99% tribal ownership
- 12,266 enrolled tribal members
- 6,012 residing on the reservation.
- approximately 1000 homes

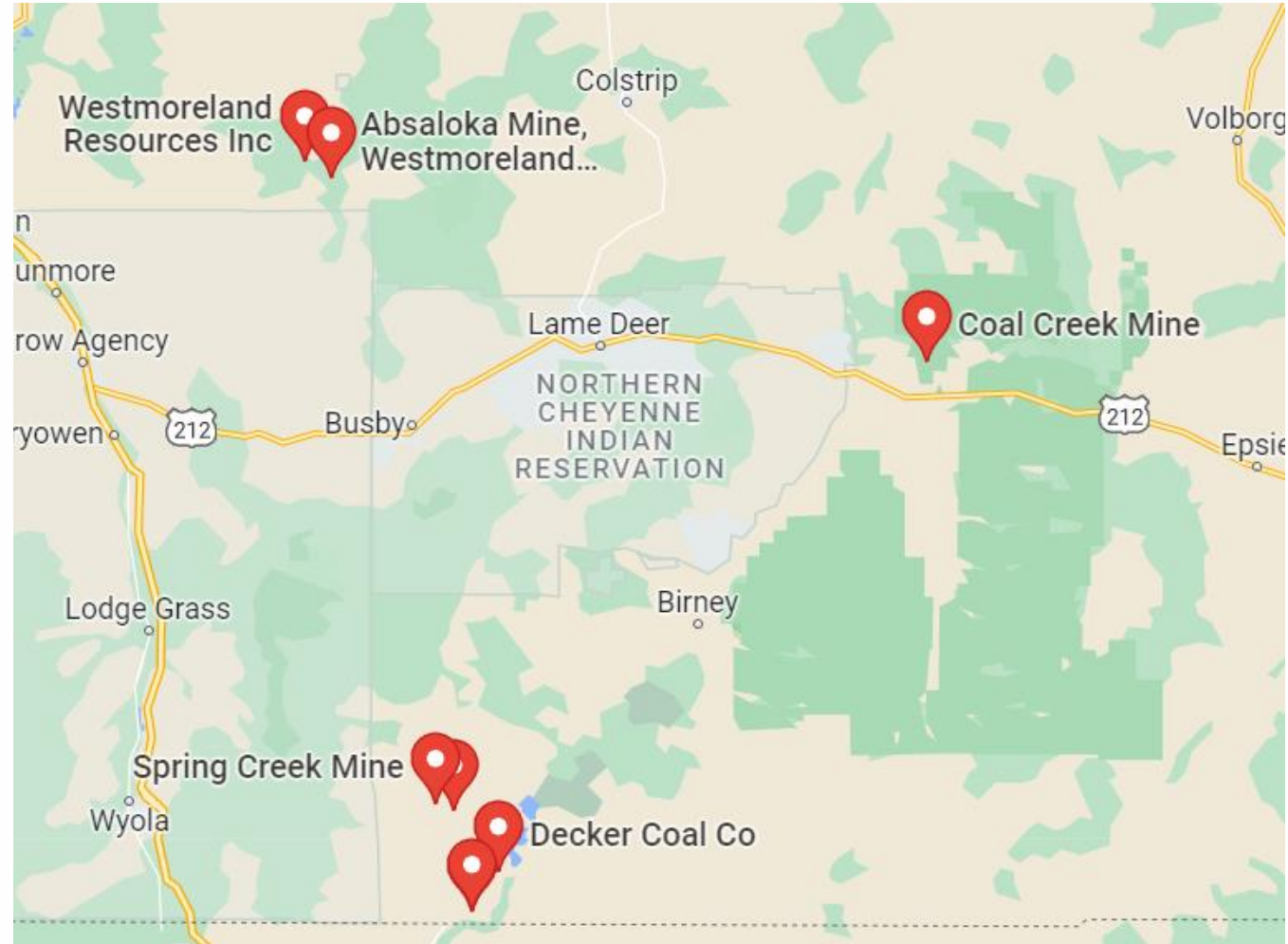


Energy History:

Surrounded by coal development

- NC Reservation sits on large deposit of low-sulphur coal
- Voted against coal for generations
- Fought Arch Coal's proposal for new Otter Creek Mine

and we won!



Energy History: New Chapter

Pursuing a new energy future



2006 - First solar demonstration project at Chief Dull Knife College

2007 - 2016 Multiple demonstration projects

2016 - Resolution passed to pursue renewable energy

2018 - Awarded DOE White River Community Solar project

2.2mW Solar Array to be built in Busby MT

Project evolution

Initial Plan - 2.2 mW utility scale array

2022 Revision - Addition of 15 residential + 3 tribal buildings to increase economic benefit to tribe

Current Plan - 75 residential projects + 3 tribal meters

eliminates \$500K substation upgrade

leverages 10kW net metering policy

\$4M total project - \$3.2M DOE + 20% \$800K cost share

Team

Project Partner / Owners Rep:

Project approach

Contract management

Workforce development



INDIGENIZED
ENERGY

Concept Designs - ProtoGen



EPC Contractor - Freedom Forever



Project status

Phase 1: 15 - 10kW(AC) ground mount systems at homes
Built Fall 2023 - currently in final inspection phase

Phase 2: 3 tribal buildings (School, Head Start, Water pump)
Spring 2024

Phase 3: 60 additional residential (rooftop + ground mount)
Spring-Fall 2024

Strategy: 10kW Ground Mount Residential Systems

- Allocated to **15 at-risk elders** across all 5 districts
- Identical 10kW AC to **max out net-metering** policy
- Designed for grid-tie + **future battery**
- Ground anchor = **no concrete** or heavy equipment



Strategy: NCT Solar Program Design

- Tribe will retain ownership of systems
- Participants sign agreement to share savings with tribe starting at 50%
- Revenue used for insurance and O&M
- Special Purpose Entity (SPE) will manage



Signed Participant Agreement!

Strategy: Workforce Development

Solar Warriors



- 11 Tribal members** attended Indigenized Energy 2-week hands on workshop
- 11 offered** jobs by EPC
- 8 accepted** and formed 2 crews. Built 15 phase 1 projects in 6 weeks
- 6 formed traveling crew** to build ground mount systems in warmer climates for winter

***Coming soon: Follow the
“Photon Wranglers” on TikTok***



Safety Circle Talk



Rack assembly



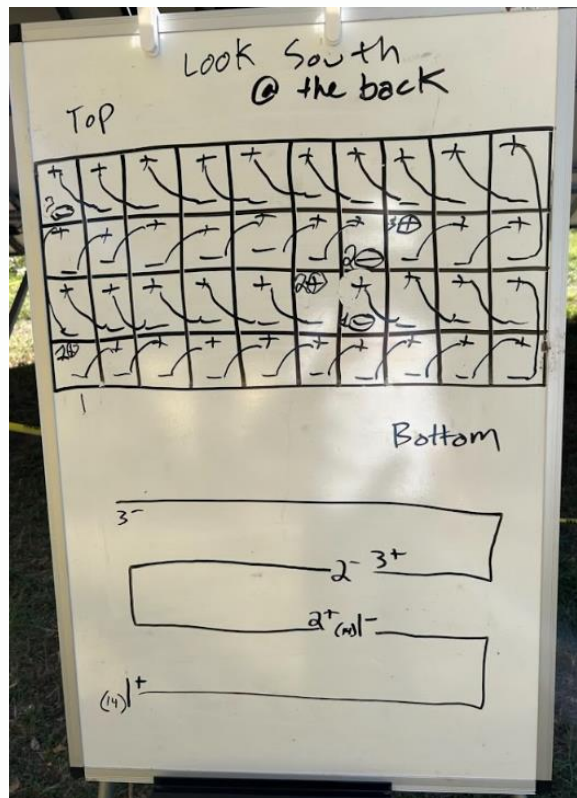
Anchor installation



Load test anchor



Prepping Optimizers



Learning string calculations



Torquing is important!!!

First one done!! - 74 more to go



“Photon Wranglers” hit the road to work during the winter in warmer states



Next Steps:

Pursuing Energy Sovereignty

Solar/wind feasibility study (EMDP) - complete

Tribal utility feasibility study (TEDC) - complete

GHG reduction plan (EPA) - Summer 2024

Energy Education and Training Center (EDA) - Spring 2025

Microgrid technical analysis (FEMA) - Fall 2026

Solar for All deployment of 150 solar homes (fingers crossed) 2027

Questions: david@4indigenized.energy

Gratitude: *To our team*

DOE - especially Tweedie Doe for support, guidance, and patience

Indigenized Energy - support on this project since 2020 at no cost to tribe

GRID Alternatives TSAF - \$125K in cost share funds

NDN Collective - \$200K in cost share funds

Jinko Solar - \$200K / (800kW) module donation

Questions: david@4indigenized.energy

