



WHITE RIVER COMMUNITY SOLAR ON THE NORTHERN CHEYENNE RESERVATION



2020 DOE OFFICE OF INDIAN ENERGY ANNUAL PROGRAM REVIEW





NORTHERN CHEYENNE

TSITSISTAS AND SOOTEO

THE NORTHERN CHEYENNE TRIBE CONSISTS OF TSITSISTAS AND SO'TEO' PEOPLE. THERE IS OVER 11,000 ENROLLED MEMBERS AND OVER 5,000 RESIDE WITHIN THE RESERVATION'S 5 DISTRICTS. OUR LAND BASE TOTALS 444,000 ACRES WITH 99% OWNED BY THE TRIBE ITSELF OR INDIVIDUAL TRIBAL MEMBERS.

THE NORTHERN CHEYENNE PEOPLE VALUE OUR CONNECTION WITH THE CREATOR AND ALL LIFE. THOUGH MANY SUFFER FROM EXTREME LEVELS OF POVERTY, OUR PEOPLE HAVE CONTINUOUSLY REFUSED TO SELL OUR RESOURCES THAT DEFORM AND POISON MOTHER EARTH.



PROJECT OVERVIEW

2.5 MW GROUND MOUNTED SOLAR ARRAY

POWER SOLD BACK TO THE LOCAL UTILITY

REVENUE WILL BE USED TO HIRE A FULL TIME MAINTENANCE PERSON

REMAINING REVENUE WILL BE USED TO LOWER THE BILLS OF ELDERS

3x 100 kW BEHIND THE METER OF THREE TRIBAL BUILDINGS

BUSBY TRIBAL SCHOOL

NORTHERN CHEYENNE HEAD START

BUSBY WATER PUMP HOUSE

15 x 10 kW RESIDENTIAL SYSTEMS

LAUNCHING CHEYENNE SOLAR PROGRAM BY TRIBE

PARTICIPANTS WILL USE PART OF SAVINGS FOR O&M



PROGRESS TO-DATE 2020

❖ PROJECT AMENDMENTS

- SOPO AND BUDGET REVISION ADDING TRAINING AND RESIDENTIAL SOLAR ASPECTS
 - WE PLAN TO ADD 15+ GROUND MOUNT RESIDENTIAL PROJECTS BEHIND THE METER INCREASING BENEFIT TO THE COMMUNITY AND PROJECT REVENUES
 - REDUCE LAND AREA FOOTPRINT OF TOTAL PROJECT
 - ADD TRAINING ELEMENT TO FACILITATE BUILDING TRIBAL CAPACITY
 - REFORMULATING TEAM (BROUGHT ON: COVENANT SOLAR INITIATIVE AND PROTOGEN, AND HAVE CONTINUED WORKING WITH KILONEWTON)
 - TO OFFSET ANY POTENTIAL ADDED COST TO THE PROJECT CAUSED BY THE REDESIGN, WE ARE UTILIZING AN EMDP GRANT (DOES NOT COUNT TOWARDS COST SHARE) AND THE HELP OF COVENANT SOLAR'S PRO-BONO ASSISTANCE



Project Progress 2020

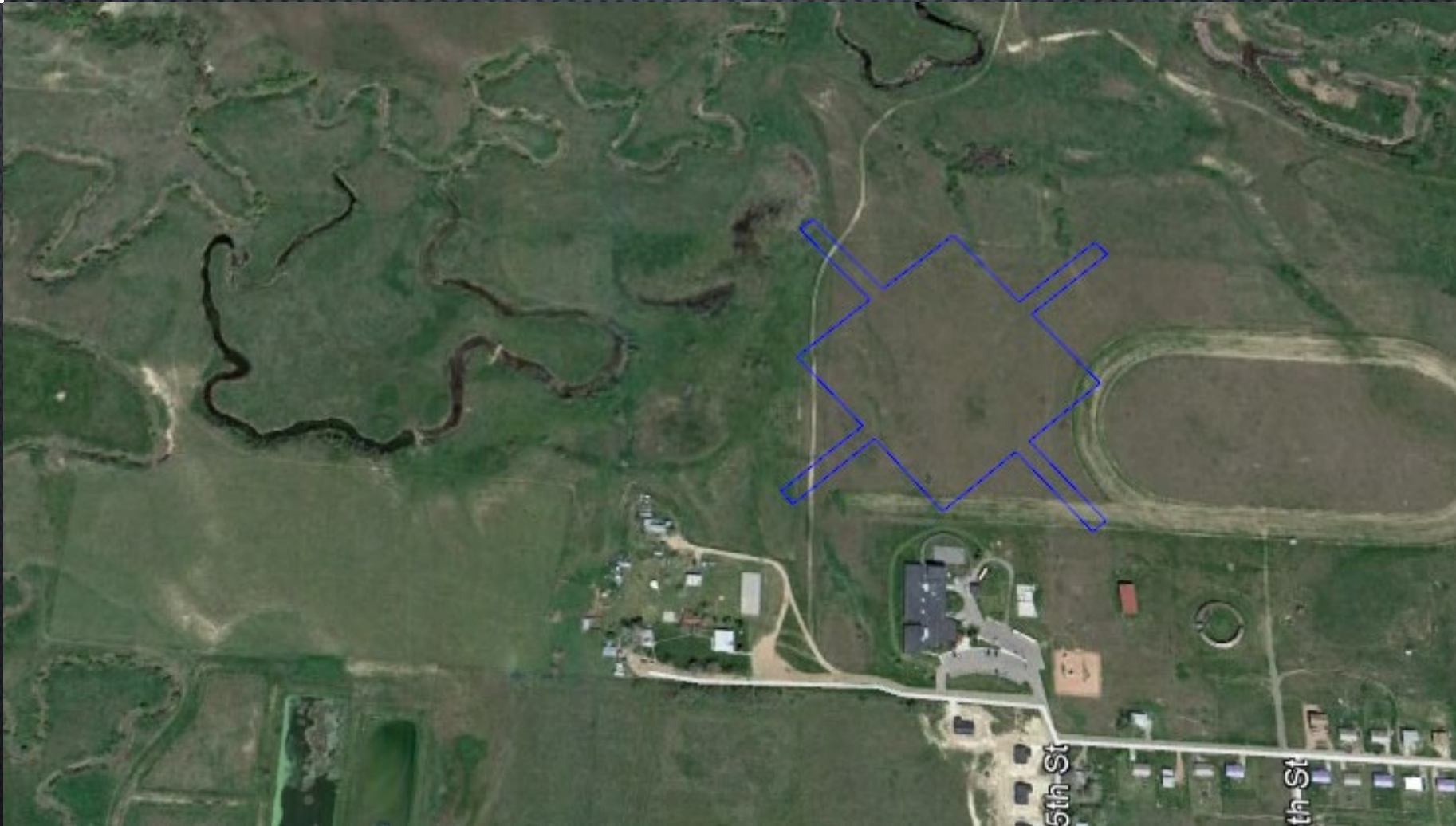
- 2.5 MW
 - INTERCONNECTION AGREEMENT SUBMITTED
 - 9 ACRE LAYOUT PLAN IN PROGRESS
 - PPA AT \$26.5/MWH OFFERED BY BASIN
 - PARTNERSHIP WITH COVENANT SOLAR TO IDENTIFY TAX-CREDIT INVESTORS AND DISCOUNTED EQUIPMENT PURCHASES
- 3 x 100 kW BEHIND THE METER
 - SIZED TO BE BELOW TRECO 100 kW LIMIT FOR SMALL GENERATION
 - PROPOSING CO-INVESTMENT BY TRIBE
 - SYSTEMS IN DESIGN FOR BIDDING
- 10 kW RESIDENTIAL
 - WILL USE TRECO RESIDENTIAL NET-METERING POLICY
 - PROGRAM TO IDENTIFY PARTICIPANTS DESIGNED
 - SPE FORMATION (INDIGENOUS POWER AND LIGHT) IN PROGRESS TO MANAGE SYSTEM OWNERSHIP



Proposed Layout

BUSBY A.K.A. WHITE RIVER - 2.5 MW
Mounted Solar Array

Ground





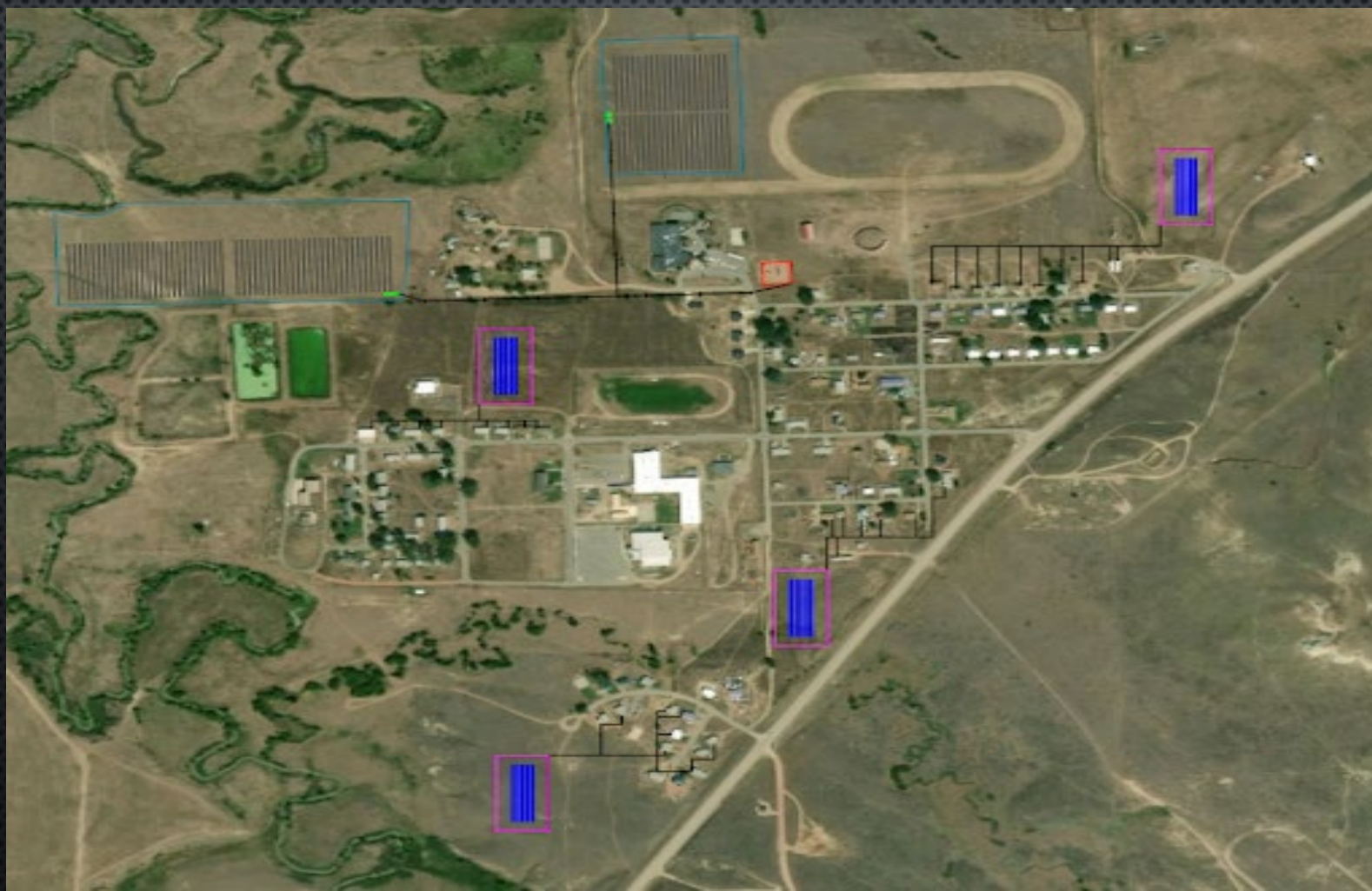
PROPOSED LAYOUT

3x 100 kW BEHIND THE METER OF THREE TRIBAL BUILDINGS





POTENTIAL LAYOUT 10kW Residential





Training Program Design

- PERFORMED IN CONJUNCTION WITH CHIEF DULL KNIFE COLLEGE
- TARGETING TRIBAL MEMBERS WITH JOB SKILLS AND CONSTRUCTION EXPERIENCE
- HANDS-ON AND FOCUSED ON THE GROUND-MOUNT EQUIPMENT AND METHODS THAT WILL BE USED ON WHITE RIVER PROJECT
- PARTICIPANTS COMPLETING TRAINING WILL BE OFFERED INTERNSHIPS OR FULL TIME JOBS IN THE CONSTRUCTION OF RESIDENTIAL AND COMMERCIAL PROJECTS FUNDED BY THE GRANT



PROJECT PARTICIPANTS

TRIBAL PRESIDENT

TRIBAL COUNCIL

SUSTAINABLE ENERGY COMMITTEE

RENEWABLE ENERGY MANAGER

NCT ATTORNEYS

KILONEWTON – RENEWABLE ENERGY CONSULTANT

COVENANT SOLAR INITIATIVE

PROTOGEN

ECO CHEYENNE

CHIEF DULL KNIFE COLLEGE



PROJECT OBJECTIVES

- LOWER THE COST OF ELECTRICITY FOR AS MANY TRIBAL MEMBERS AS POSSIBLE
 - TRAINING AND JOBS FOR TRIBAL EMPLOYEES
 - CREATE REVENUE STREAM
- LEARN AND MANEUVER FEDERAL, STATE, AND TRIBAL ENERGY REGULATIONS
- DEVELOP CAPACITY TO PLAN, DEVELOP, AND MANAGE RENEWABLE ENERGY ASSETS



PREVIOUS ENERGY PROJECTS

2005 CHIEF DULL KNIFE SOLAR DEMONSTRATION PROJECTS

2007 WIND FEASIBILITY STUDY

2009 50 kW ROOF MOUNTED SOLAR ARRAY (SHOULDER BLADE SENIOR COMPLEX)

2016 TRIBAL COUNCIL PASSED SUSTAINABLE ENERGY INITIATIVE

2017 96 kW ROOF MOUNTED SOLAR ARRAY (LITTLE WOLF CAPITOL BUILDING)

2020 EDAP COMMUNITY CONSULTATION AND SCOPING REPORT, SOLAR, WIND,
AND HYDRO



THE FUTURE

WIND AND SOLAR TRAINING

WEATHERIZATION

COMMUNITY/RESIDENTIAL/UTILITY SCALE PROJECTS

TRIBAL UTILITY FORMATION

ENERGY INDEPENDENCE



CONTACT INFORMATION

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