



# Renewable Energy Projects

## NTUA Generation, Inc.



# Solar Makes a Good Neighbor

Solar facility will generate no emissions or odors, and it will produce limited noise and have a low height profile

## SOLAR FACILITY

- Long, continuous rows of solar modules within a perimeter fence will be installed throughout the project site
- The modules are expected to rise no more than 6-10' above ground depending on their angle of rotation
- While visible from the adjacent road, the solar project is expected to have minimal impacts on the visual landscape from a distance



Simulation of solar array for similar project



Simulation of similar project from the road



Simulation of BESS facility for similar project

## ENERGY STORAGE AND OTHER FACILITIES

- The battery storage systems are typically housed in either modular metal structures or within a climate-controlled building
- The project may also include an operations and maintenance building with on-site parking
- The project's transmission line will run parallel to the Black Mesa and Lake Powell Railroad and to existing utilities and transmission lines



## NTUA Solar Development

### **Proven Track Record in Renewable Energy Development**

- Kayenta I: 27 MW (In Service April 2017)
- Kayenta II: 28 MW (In Service August 2019)
- Drew Solar: 100 MW (Est. In Service Fall 2022)
- Red Mesa: 72 MW (Est. In Service January 2023)
- Cameron: 200 MW (Est. In Service Winter 2024)
- LeChee: 400 MW plus 1200 MWh Battery Storage (Est. In Service Winter 2025)





# NTUA Solar Development:

## **NTUA Solar Kayenta I and II Projects**

- **Employment**
  - **90% of all construction jobs went to Navajo citizens**
    - **434 construction jobs were created**
    - **Over 7,000 hours of specialized job training was provided**
  - **100% of the workforce operating these projects are Navajo citizens**
    - **3 Full-Time Permanent jobs were created**
- **Over 550 people attended each of the two job fairs which were held in Kayenta**
- **As a result of this project, NTUA was able to connect 7 homes to its electric system**
- **Margin derived from these projects support electrification projects such as Light Up Navajo and help keep electric rates affordable for all NTUA electric customers**
- **The construction of Kayenta I and Kayenta II generated over \$5M in taxes to the Navajo Nation**
- **For allowing NTUA to build the two projects, NTUA provides 4 scholarships and 2 internships annually for students from the Kayenta community**
- **The \$10M+ payroll generated over \$30M in economic activity in the Kayenta region (the economic activity is using a multiplier as described by ASU and NAU)**





## NTUA Solar Development: Red Mesa Tapaha Solar Project

# Direct Benefits to Navajo Nation & Red Mesa Community

- Approximately 250-300 construction jobs will be created with a projected salary payroll of \$6.2 million
- Specialized solar job training will be provided
- Projected construction period is 12 months
- Over 300 people attended the one-day drive-up job fair
- 3 Full-Time permanent jobs will be created
- As a benefit of the project build-out and a commitment by NTUA, NTUA will provide 50 scholarships and 25 internships for students within the Red Mesa community over the life of the project
- NTUA will support Red Mesa Chapter in securing a portion of the lease revenue from the Navajo Nation





# NTUA Solar Development: Cameron Solar Project

## **Direct Benefits to Cameron Community**

- **Creation of approximately 400 hundreds solar construction jobs with a projected salary payroll of \$8.3 million**
- **Specialized solar job training will be provided. No experience required**
- **Projected construction period is 12-18 months**
- **NTUA will provide at least 50 scholarships and 25 internship for students from the Cameron community over the life of the project**
- **Cameron Chapter will host job fair(s) and job training workshops**
- **Approximately 4 Full-Time permanent jobs will be created**
- **NTUA will support Cameron Chapter in securing a portion of the lease revenue from the Navajo Nation, as provided in Navajo Nation Energy Policy Act of 2013**
- **Project will require infrastructure development within the region and will be an anchor tenant to promote further renewable and business development within the Cameron Chapter**
- **New substation will be constructed which will power Navajo homes in the community**



# The Project will Create Meaningful Benefits for Local Communities

## JOBS & TRAINING

- 300-650 construction jobs
  - 10-20 operations and maintenance jobs
  - Extensive Job Training
- No Previous Experience Required
- Opportunities to work on future projects in the area and beyond



## ENVIRONMENTAL

- ~51,000 GWh of solar energy over project life
  - Carbon reductions equal to planting 250 million trees, or
- Removing almost 260,000 cars from the road every year





# NTUA Solar Development

## Benefits to the Navajo Nation

- **Navajo Nation Ownership:** The Nation can demonstrate sovereignty and control by maintaining majority ownership of projects. A key component of NTUA-developed renewable energy projects is the projects are majority owned by the Nation. Kayenta I, Kayenta II and Red Mesa are all majority owned the Nation through NTUA. NTUA intends to maintain majority ownership of Cameron and LeChee solar projects.
- **Jobs & Specialized Job Training:** over 400 construction jobs were created from the Kayenta solar plants. NTUA anticipates between 1,000-1350 constructions jobs will be created over the next 3 years through NTUA renewable energy projects
- **Sales Tax Revenue:** For each project developed and constructed on the Navajo Nation, the Nation receives 6% of the project cost through sales tax. Kayenta I & II generated over \$5 million in sales tax revenue to the Nation. NTUA's other renewable energy projects are projected to generate over \$74 million in sales tax revenue over the next 4 years





# NTUA Solar Development

## Benefits to the Navajo Nation

- **Lease & Transmission Revenue:** NTUA enters a lease for every renewable energy project developed and constructed. The Nation has agreed to pay the Nation \$17.1 million in lease payments for Cameron and Red Mesa solar projects. NTUA will also pay the Nation approximately \$90 million a portion of the use of the Nation's transmission rights for the Cameron solar project.
- **Stabilized Utility Rates:** Revenue generated by NTUA renewable energy projects stay on the Navajo Nation. The revenue is used to help keep NTUA electric rates stable (NTUA has not had an electric rate increase since 2008) and is also used to connect Navajo homes to the electric grid.





# NTUA Solar Development: **The Navajo Nation'**

**On April 2, 2019 President Jonathan Nez and Vice-President Myron Lizer signed the Navajo Háyootkáát (Sunrise) Proclamation (“Proclamation”). The Proclamation states that the Navajo Nation will pursue and prioritize clean renewable energy development for the long-term benefit of the Navajo People.**

**The Proclamation is based on four principals:**

- 1. Cultivating a diverse energy portfolio;**
- 2. Restoring the land and water;**
- 3. Rural Electrification of homes; and**
- 4. Development of utility-scale renewable energy projects**

**The Navajo Nation is strategically positioned to meet the goals of both the Proclamation and the Policy for the benefit of the Navajo Nation and its people through this project and all NTUA solar generating projects.**

