

Renewable Project Development Overview

NTUA/NTUA Generation

Glenn Steiger

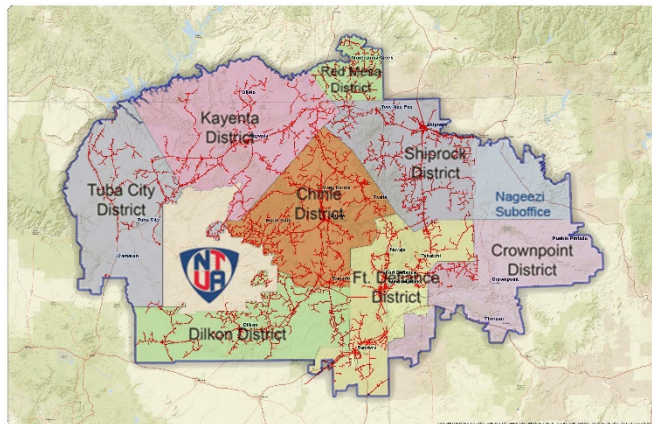
August 29, 2018



History

NTUA Overview

- The Navajo Tribal Utility Authority (NTUA) has continuously served the Navajo people for more than 59 years.
- NTUA was established on January 22, 1959, and today is the largest tribally-owned and operated multi-utility company in the United States.
- NTUA was created to address the absence of utilities on the Navajo Nation



Kayenta I Solar Project

Mission

- Since inception, NTUA has grown into a thriving tribally-owned enterprise delivering a portfolio of services to a service area of more than 27,000 square miles.
- Currently serving over 41,000 electric customers, NTUA is organized for the operation, maintenance and expansion of electric, communications, natural gas, water, wastewater, and generation, including photovoltaic (solar) services for the Navajo people at a low and reasonable cost.
- NTUA seeks to promote economic development, and employment opportunities on the Navajo Nation, and to improve the health and welfare of the residents of the Navajo Nation.

Summary

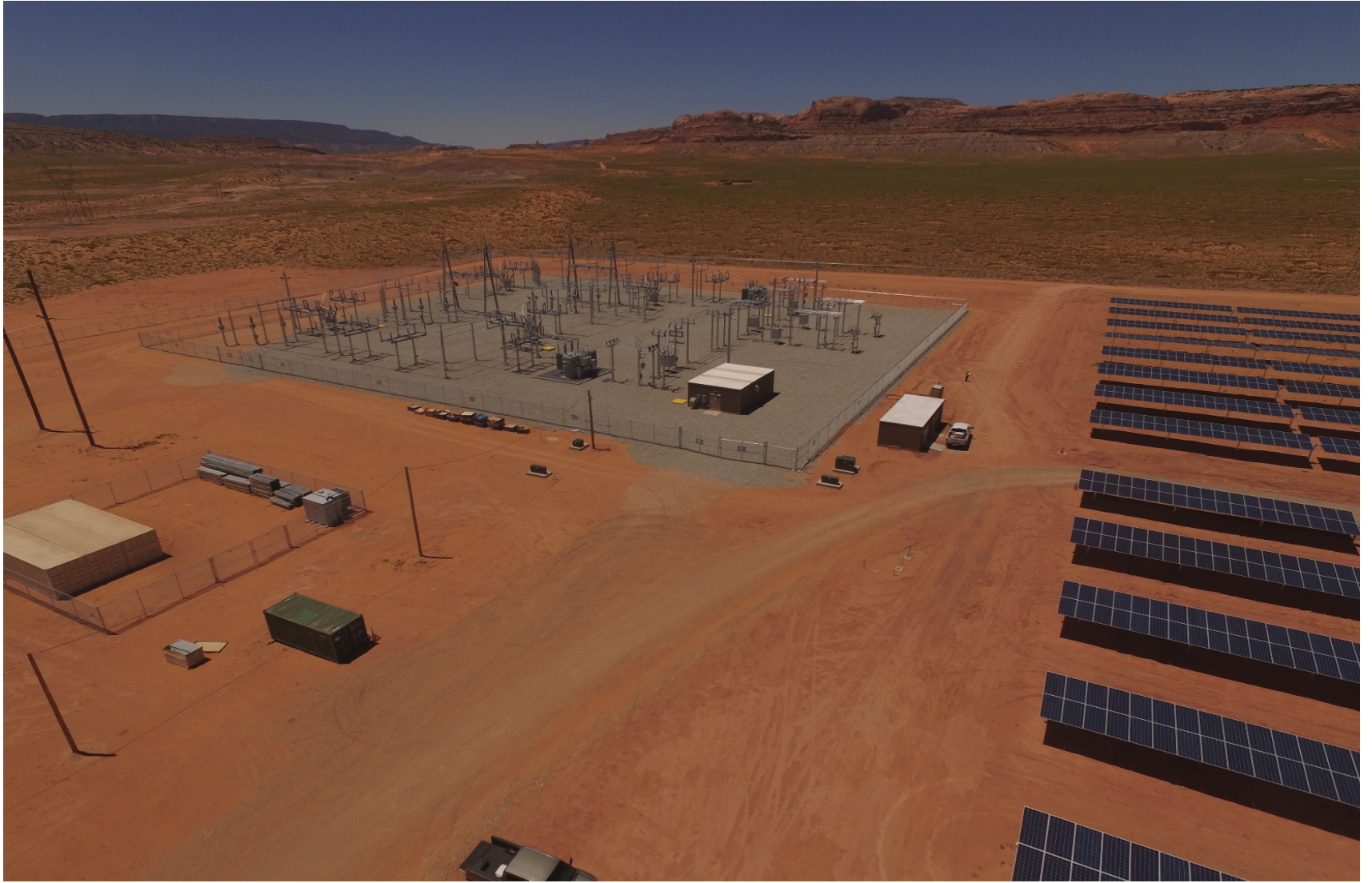
NGI Overview

- NTUA created NTUA Generation, Inc. (NGI) for the purpose of investing in and developing wholesale energy projects within and outside of the Navajo Nation.
- NGI currently owns the Kayenta I solar project, a 27.3 MW facility, located within the Navajo Nation.
- NGI is in the process of initiating construction of Kayenta II solar project, a 27.8 MW facility, also located in Kayenta, AZ.

- NGI has secured a term sheet for the development of 100MW of solar and environmental attributes for a California municipal entity.
- NGI is in early development stage for the development of over 1GW of renewable energy (solar, wind, and pumped storage) generation within the Navajo Nation.









NTUA Solar Development:

Helping Navajo Communities Prosper

- Infrastructure development
 - Increase electric distribution lines
 - Increase water distribution lines
 - Increase communication assets
 - Solar Generation for Navajo use
- New Tax dollars to Navajo Nation for more infrastructure construction and utility use
- Creating a new energy workforce to increase job opportunities for Navajo
 - Providing specialized solar training for the Navajo people
- Increase additional scholarship/internship opportunities for students in Navajo Chapters
- Create expenditure of dollars in the local community, e.g., hotels, food, arts and crafts vendors, and local services
- New Tax and other revenue for Navajo Nation and local government related to Project Construction



KAYENTA SOLAR PROJECT – PHASE I

Overall Financial Benefits to Navajo Nation

- The construction generated \$3,017,055 in taxes to the Navajo Nation
- The first year tax revenue exceeded \$211,852 and the 30-year total will generate approximately \$7,584,302 in tax revenue to the Navajo Nation
- Projected \$850,000 in additional NN sales tax dollars provided from wages that were spent within the Navajo Nation
- Returns from Phase I are being used to pay for the electrification of Navajo Homes, including the #LightUpNavajo Project



KAYENTA SOLAR PROJECT - PHASE I

Direct Kayenta Chapter Benefits

- Navajo people were paid \$5.2 M as result of the construction of this project
- The \$5.2 M generated over \$15.6 M in economic activity in Kayenta region
- Approximately 10 homes electrified and now have water service
- Additional College Scholarships have been approved by NTUA's Board for award to students in the Kayenta Chapter
 - Two Scholarships and One Internship
- As a result of job creation - Navajo people received over 4,700 hours of specialized training
- Specialized training opportunities for Navajo people, including creating long-term Solar operation & maintenance jobs



During height of construction, 284 people worked on the Project - 85 percent were Navajo

Lessons Learned

- **Start early with financing options**
- **Thoroughly vet financial background of EPC contractor**
- **Involve the local community**
- **Provide adequate “cushion” in construction schedule**
- **Assign internal “project manager”**
- **Allow for production “headroom” with PPA commitments**
- **Require a “surviving” warrantee” from General Contractor**

Kayenta I Overview - Performance

- **Commercial Operation Date - May 15, 2017**
- **In continuous operation with full output since date of Commercial Operation**
- **Output has exceeded design criteria by approximately 1-2% on a month-over-month basis**
- **No significant maintenance issues to date**

Project Overview – Kayenta II



Projected Financial Benefits to Navajo Nation

- The construction is projected to generate \$2,217,192 in taxes to the Navajo Nation
- The first year tax revenue is expected to exceed \$172,835 and the 30 year total will generate approximately \$5,185,044 in tax revenue to the Navajo Nation
- Projected \$1,200,000 in additional NN sales tax dollars provided from wages spent within the Navajo Nation
- Returns from Phase II will be used to pay for the #LightUpNavajo Project, in order to bring electricity to unserved Navajo homes



KAYENTA SOLAR PROJECT - PHASE II

Direct Kayenta Chapter Benefits

- Navajo people are projected to be paid \$6.2 M to \$7.5 M as result of the construction of this project
- The \$6.2 M to \$7.5 M should generate over \$18.6 M to \$22.5 M in economic activity in the Navajo Nation and Kayenta region
- Additional homes will be electrified
- Additional College Scholarships have been approved by NTUA's Board for award to students in the Kayenta Chapter.
 - Two Scholarships and one Internship
- As a result of job creation - Navajo people expected to receive 3,000 hours of specialized on-the-job training
- Specialized training opportunities for Navajo people, including the creation of long-term Solar operation & maintenance jobs

Groundbreaking Celebration for Kayenta II - August 23, 2018



Initial Development Issues

- **Land Acquisition**
- **Lease**
- **Chapter Approval**
- **Grazing Rights**
- **Permitting**
- **BIA approval**

Financing

- **Construction Loan**
- **Full Amortization**
- **Partial Amortization**
- **Tax Exempt**
- **Investment Tax Credit Financing**
- **Inverted Lease**

Thank you!

Glenn Steiger
Office of the General Manager
Navajo Tribal Utility Authority
glenns@ntua.com
928-729-6255

