



# Navajo Tribal Utility Authority Smart Grid Workforce Training

## Project Description

Navajo Tribal Utility Authority (NTUA) has been diversifying its power generation sources and modernizing its distribution services through the upgrade of remote switching and monitoring operations, feeder and substation automation for online monitoring and equipment interoperability, and the deployment of information technology solutions. In support of these improvements, NTUA is developing a program to provide trainees with the skills and abilities to continue these upgrades and contribute to the development of a nationwide Smart Grid. As an educational partner, Navajo Technical College is marketing the training program and identifying individuals within its students who have an interest or aptitude to work within the power industry. In addition to the Navajo Technical College, training is also provided at NTUA's district offices and will be web-enabled for distance learning. Courses provide the fundamentals of electric power distribution systems, business management skills, and specialized training in advanced areas. NTUA's training program will maximize employment opportunities for citizens of the Navajo Nation, reduce unemployment, and aid in the successful implementation of the Smart Grid.

## Goals/Objectives

- 43 individuals trained for jobs within the NTUA in Smart Grid implementation and renewable energy projects, including wind and solar power

## Benefits

- Access to electricity and other basic infrastructure to the estimated 18,000 homes currently without this necessity
- Modernized power distribution services
- Jobs created and retained
- Smart Grid implementation and development



## CONTACTS

**Deborah Buterbaugh**  
Project Manager  
National Energy Technology Laboratory  
3610 Collins Ferry Road  
Morgantown, WV 26507-0880  
304-285-4164  
Deborah.Buterbaugh@netl.doe.gov

**Terry Battiest**  
Principal Investigator  
Navajo Tribal Utility Authority  
Highway 12 North  
P.O. Box 170  
Fort Defiance, AZ 86504-0170  
928-729-6211  
terryb@ntua.com

## PARTNERS

Navajo Technical College

## PROJECT DURATION

6/30/2010–6/30/2013

## COST

**Total Project Value**  
\$1,408,971

**DOE/Non-DOE Share**  
\$704,485.50/\$704,485.50

## PROJECT LOCATION

Arizona  
New Mexico  
Utah

CID: OE0000442

*Managed by the National Energy Technology  
Laboratory for the Office of Electricity  
Delivery and Energy Reliability*

