



2020 CARES Act - NTUA Projects

Progress Report Update #11 for Navajo Nation Leadership

The Navajo Nation and the Navajo Tribal Utility Authority (NTUA) are committed to extending utilities to the homes of Navajo Nation families to prevent the further spread of COVID-19. On August 16, the Navajo Nation (NN) announced the funding it would provide to NTUA to construct utility projects eligible under the United States CARES Act by December 30.

NTUA Progress Report Update #11 CARES Act Projects completed as of November 12, 2020

NTUA's Off-Grid Residential Solar Program

Field assessment work crews have been conducting site visits to prepare homes for 3,000 kW solar unit placement. NTUA will be distributing on the basis of 10 units per each Navajo Nation Council Delegate legislative district and an additional 40 units are designated for the homes of U.S. Military Veterans. These solar units will only be offered to homes currently not connected to the electric grid.

199 homes have been released for construction

- 34 of these homes belong to Veterans
- 199 homes have been release to have site work performed
- 134 homes have been assigned to electricians to have their house wired
- 65 homes are in the house wiring inspection process

Electric Connections and Rights of Way Acquisition

NTUA District and Electric Construction Department electric line crews continue to work 10 hour days. Various crews are building powerlines on weekends and holidays. As a result of their efforts:

- 358 families are now connected to the electric grid
- 16 homes more than last week

Rights of Way - more families applying for electric service

- 140 homes still require Right of Way (ROW) acquisition
- 117 projects have been released by NN Land Department (NLD) clearing the way for electric line crews to proceed w/construction
- 30 SLA (Service Line Agreements) are pending with General Land Development Department.

Electric Capacity Projects

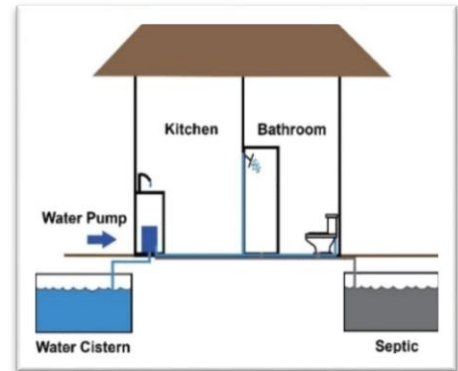
The electric division has completed 27 out of the 59 planned projects. There are 17 projects in construction, including Kinlichee (AZ), Kayenta (AZ), Shiprock (NM), and Mexican Water (UT). Thirteen (13) projects are set to begin construction later this month they are in Fort Defiance (AZ), Crystal (NM), Navajo Mountain (UT), and Chinle (AZ).



Water Cistern Project

The CARES Act is providing funding for 150 water cisterns systems. A cistern water system is used where there is no water available and is used for household for drinking water, kitchens and bathrooms. A cistern water system stores the water needed for a household in a large 1,000 gallon container that can be filled from a watering truck.

NTUA is working with the Navajo Engineering and Construction Authority (NECA) to install the water cisterns and plumbing systems, including building a bathroom addition and plumbing, if necessary. Currently, the combined NTUA/NECA teams are conducting assessment/feasibility visits to the homes of applicants. Construction has begun on bathroom additions.



Water/Solar Cistern Units

Completed feasibility surveys on 209 homes

122 families have qualified

- 58 bathroom foundations have been completed
- 26 out of 118 septic systems have been installed
- 53 out of 122 homes have electricity
- 31 out of 122 homes need a solar unit
- 2 out of 122 homes will receive only a generator
- 36 out of 122 will be connected to the electric grid

87 homes were determined to be not feasible - did not meet requirements. Homes were either: Abandoned, not structurally adequate or non-existent (burned down)



Water Loading Stations

Renovations and upgrades to 6 regional watering loading stations have been completed. Four are in Arizona (Bodaway Gap, Leupp, Lupton, and Wide Ruins) and two New Mexico communities (Torreon & Lake Valley). These watering loading stations are now open for public use.

The newly constructed Fort Defiance (AZ) and Crownpoint, NM water loading stations are completed and open for public use. Two additional water loading stations are on schedule to be completed by end of November and expected to be open for public use in December. The two are located in Cameron and Lower Greasewood AZ.

Renovations and upgrades are planned for 5 other water loading stations - four are in Arizona (Chilchinbeto, Inscription House, Whitecone, and Kinlichee) and one in NM (Pueblo Pintado). Construction began in mid-October and will continue through December.

Water Machine installs are set to begin Dec. 7th. Materials have been ordered for all sites and the machines for all sites are being built by Aquaflow (water machine contractor).

Currently, construction is underway on four off-line wells located in Hunter's Point (AZ), Chinle (AZ), Newcomb (NM) and Sheepsprings (NM). Work on these livestock water loading stations is scheduled to be completed by December 25th.

Water Wells & Water System Upgrades

Pump/motor replacements for 50 of the 54 water wells have been completed. Renovations for two major water tanks in Fort Defiance (AZ) and Sawmill (AZ) are scheduled to be completed by early December.

Engineering services for three new water wells are being finalized. Three new wells are planned to allow residential and commercial growth in Houck (AZ), Ganado (AZ), and Thoreau (NM). The Thoreau is currently being drilled. Construction is underway to replace 27,000 feet of waterline in the Park Estates, near Sanders, (AZ).



Wastewater Facilities Improvements

Renovation of wastewater lift stations in Iyanbito (NM) has been completed. A lift station moves wastewater in pipes from a lower elevation to a higher elevation in order to allow the wastewater to flow downhill to a lagoon.

4,800 feet of the Window Rock (AZ) wastewater trunk line will be renovated. Construction will start in November and run through mid-December. The construction of the Pinon (AZ) wastewater lagoon is 45% complete. Construction on schedule to be completed by December 10th.

Free Student WI-FI Hotspots

38 free Student WI-FI hotspots have been connected in various communities throughout the Navajo Nation. The goal was to place the hotspots so that no one would have more than a 45-minute drive to access the Internet. This initial CARES Act target was 31 locations; however, due to increased demand, NTUA and NTUA Wireless will install additional WIFI hotspots. The latest installs were at Kaibeto (AZ), Bodaway/Gap (AZ), and KinDa'Lichii (AZ). Installation is in progress for Leupp (AZ), Oaksprings (AZ). Two other locations are to TBD.

Telecommunications/Broadband

The upgrade of NTUA fiber optic backbone from 10 Gbps to 100 Gbps has been completed and is in the testing phase of the project. This increase in capacity is necessary to handle the increased internet traffic due to the COVID-19 pandemic. Without the upgrade to fiber optic backbone, NTUA would not be able to support the new 102 Cares Act broadcast stations.

Of the 102 broadcast stations:

- 98 are uplifts
- four (4) are brand new sites

- 5 of 102 sites are in-service
- 13 of 102 sites are under construction



Navajo Nation leaders cut the ribbon ushering in a new direction to enhance broadband communication for Navajo communities. NN President is joined by NNC Delegate Slater (both center) and other tribal leaders at the Tsaille (AZ) tower site.

Cont'd Telecommunications/Broadband

The broadcast stations provide an increase in internet speeds that the Navajo people deserve, especially the students attending school on-line and patients and doctors engaging in telehealth.

Photo right: Tribal leaders/community officials gather to cut the ribbon for the newest uplift site in Chinle (AZ). Ribbon cutting events for Tsaile (AZ) and Chinle were held on the same day - with one following the other.



Pinedale, Beclabito, Summit East, and Woodsprings Towers

Tower construction crews have completed the foundation work on two of the three remaining towers. November 30th remains the tower construction completion date. The installation of backhaul, broadcast stations and testing is scheduled to be completed by Dec. 23rd.

The Pinedale (NM) tower is built and is the first tower completed with CARES Act funding and is the first tower to feature the CARES Act broadcast station. The tower is now connected to the internet and providing mobile phone service to the area for the first time. The dedication ceremony was held October 12, 2020.

Multi-segmented Fiber Project - Tuba City (TC)

The fiber project from the NTUA TC tower to TC High School is currently under construction and is scheduled to be completed by 12/4/2020. The fiber line running from the TC Fairgrounds to NTUA TC District Office Tower cannot be constructed until NTUA receives approval from the Hopi tribe and Navajo Nation Land Department (NNLD).

The fiber build from the NTUA TC tower to the TC Junior High School, the TC Primary Elementary School, and the Primary Boarding School cannot be constructed until NTUA receives approval from the Bureau of Indian Affairs (BIA). NTUA is also awaiting BIA approval for the fiber build to the TC Regional Hospital.

The fiber build to TC Greyhills Academy also awaits NNLD approval. The TC Plaza fiber build is scheduled to start construction the week of 11/16/2020; however, NTUA can only construct 90% of the project; 10% is pending NNLD approval.

Kaibeto to Page Fiber line

The fiber line from Tonalea to Navajo Generating Station (outside Page, AZ) has been completed. Work is concentrating on the final installation of the electronics and shelters. The entire project targeted for completion November 23, 2020. Once finished, area residents will notice enhanced services for mobile phones or broadband towers to provide the data needed for distance learning.

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