



2020 CARES Act - NTUA Projects

Progress Report Update #6 for Navajo Nation Leadership

The Navajo Nation and the Navajo Tribal Utility Authority (NTUA) are committed to providing 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. Congress set December 30, 2020 as the construction deadline. NTUA has mobilized, understanding that NN leadership has entrusted the tribal enterprise to build, extend, and provide essential utility services, especially to those, like the elderly, who are most vulnerable to COVID-19.

NTUA Progress Report Update #6 CARES Act Projects completed as of October 8, 2020 Advancement made since October 1, 2020

NTUA's Off-Grid Residential Solar Program

NTUA has received applications from 992 people for the Off-Grid residential solar program. It is an increase of 136 people. To date, NTUA teams conducted 795 Feasibility Study/Site Assessments, an increase of 201 homes. Of those, 152 were found to be feasible, 219 non-feasible. Overall 424 applications are pending final review for the 3,000 Watt off-grid residential solar unit with an energy efficient refrigerator.

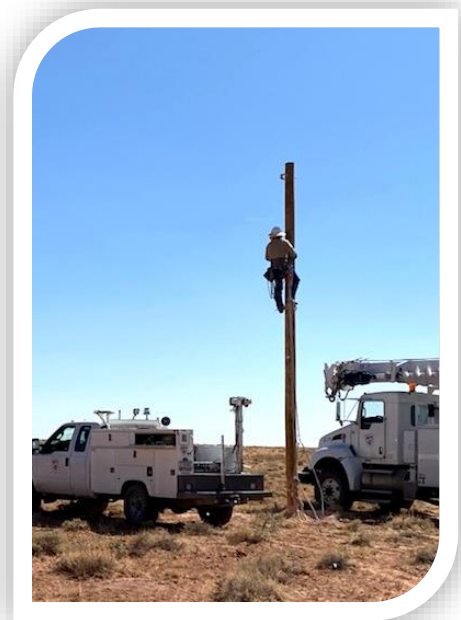
Electric Connections and Rights of Way Acquisition

District and ECD electric line crews continue to work 10 hour days, weekends and holidays to extend electricity to homes throughout the region. As a result of their efforts:

- 260 families are now connected to the electric grid
- 17 homes more than last week

Rights of Way - families submitting applications:

- 105 homes still require Right of Way (ROW) acquisition
- 45 projects have been released by NN Land Department (NLD) clearing the way for electric line crews to proceed with construction.
- 24 SLA (Service Line Agreement) ROW projects that were pending have now been approved by General Land Development Department and Navajo Nation Land Department.



Electric Capacity Projects

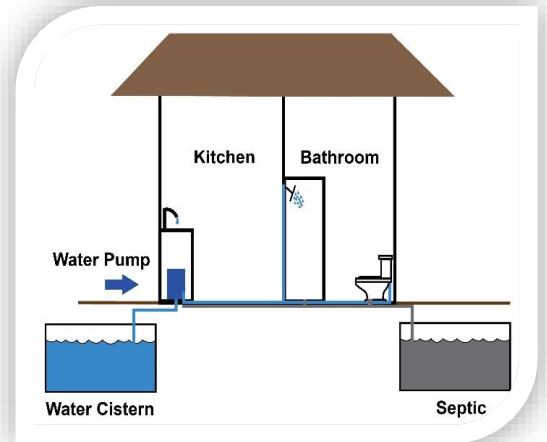
The electric division has completed 2 more electric capacity projects, bringing the number to 18 out of the 59. There are 7 projects in construction; 7 projects await contractor assignment, some of which include:

- Powerline Conversion
- Substation - Switch/Motor replacement
- Substation - Recloser Installation
- Transformer/Bushing & Pole replacements

Water Cistern Project:

The CARES Act is providing funding for 150 water cistern 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 115 homes

- 85 families have qualified
 - Will all receive Cistern systems
 - 81 will receive house-wiring
 - 78 homes will receive bathroom additions
 - Construction is underway in 22 homes
 - 3 homes do not need house-wiring or bathroom additions
- 30 homes determined not qualified - did not meet requirements. Homes were either:
 - abandoned
 - not structurally inadequate
 - or non-existent (burned down)
- 33 homes do not need a solar unit. These homes are connected to the electric grid.



Water Loading Stations

Renovations and upgrades have been completed to 5 regional watering loading stations, three in Arizona (Bodaway Gap, Leupp, Lupton) and two New Mexico communities (Torreon & Lake Valley). These watering loading stations are now open for public use. A sixth water loading station at the Wide Ruins chapter house is complete and in-service for public use.

Cont'd Water Loading Stations

Renovations and upgrades are planned for 6 other locations - four in Arizona (Chilchinbeto, Inscription House, Whitecone, Kinlichee) and two in NM (Pueblo Pintado, Lake Valley).

The designs for these 5 additional stations are in final review with construction beginning in November. Target date to begin construction for water, electric, bollards (heavy posts), loading zone, and fence install October 19 – November 06, 2020 Water Machine installs set to begin Nov. 9th for Chilchinbeto, Inscription House, Whitecone, Kinlichee, and Pueblo Pintado.

Construction is 80% complete for the new watering loading station in Crownpoint, NM. Three other new watering stations, in Arizona -- Ft. Defiance, Cameron, Lower Greasewood are on schedule to be completed by late October. Fort Defiance Watering Point was installed on September 30, 2020. Fort Defiance bollards and concrete loading zone scheduled to be installed by Friday, October 9, 2020.



Lower Greasewood set to be installed on October 8, 2020. Machine to be installed by Aqua Flow (water machine contractor), water line ready with stub out, electric to be ready for connection. Once all is connected, Aqua Flow will flush to calibrate system and installment will be complete. The Cameron Chapter water loading station is underway with machine set to be installed mid-October.

Water Wells & Upgrades

The target date to begin construction for water, electric, bollards, loading zone, and fence install for 4 (four) off-line-wells are scheduled to be converted to watering loading stations for livestock, so that area residents will not haul water for livestock from potable water sources. Construction is set to begin October 19 – November 06, 2020. There are two in Arizona (Hunter's Point, Chinle) and two in NM (Newcomb, Sheepsprings). Aqua Flow will begin installing machines starting November 09, 2020 thru December 25, 2020.

Pump/motor replacements for 34 of the 42 wells have been completed to date, including Tsaille, Hardrock, Pinon, Luepp, Houck, Aneth, Red Mesa, Red Valley, and Kinlichee communities. The contracts for heavy renovations for two major water tanks in Window Rock have been executed as were contracts for engineering services for three new water wells to allow residential and commercial growth in Houck, Ganado, and Thoreau.

Wastewater Facilities Improvements

Engineering services have been procured for renovation of wastewater lift stations in Iyanbito, NM and LeChee, AZ. Lift Station designs are at 90%. 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.

Improvements are also planned for 4,800' of the Window Rock wastewater trunk line to extend its useful life for many years. Construction will start in November and run through mid-December. The construction of the Pinon wastewater lagoon is approaching 40% and on schedule to be completed by Thanksgiving.

Free Student WI-FI Hotspots:

33 free Student WI-FI hotspots have been connected in various communities throughout the region. The goal was to place the hotspots so that no one would have more than a thirty-minute drive to access the Internet. This completes the initial target; however, due to increased demand, NTUA and NTUA Wireless are looking into the possibility of installing additional WIFI hotspots at:

- Leupp Chapter
- Shiprock Fairgrounds (latest on-line)
- Kaibeto
- Red Valley Chapter
- Sheepsprings
- Oak Springs

NTUA Wireless has already ordered over \$12.9 million of the long lead time materials for the 102 new broadband broadcast stations which will deliver high speed internet to homes

Telecommunications:

The NTUA fiber optic backbone upgrade from 10 Gbps to 100 Gbps remains on schedule. This increase in capacity is necessary to handle the increased internet traffic due to the COVID-19 pandemic. Without this uplift installation of the 102 Cares Act broadcast stations would not have provided the increase in internet speeds that the Navajo people deserve, especially the students attending school on-line and patients and doctors engaging in telehealth.

The Pinedale (NM) tower is constructed and now connected to the internet. NTUA Wireless crews are scheduled to complete the installation of the broadcast stations and final testing by October 15th.

Beclabito, Summit East, & Woodsprings Towers:

Construction crews are awaiting the arrival of ordered equipment and materials to begin building these towers. The land lease is acquired, the engineering completed, and the contracts have been awarded for the tower. The target completion date remains November 30th. The installation of backhaul, broadcast stations and testing is scheduled to be completed by Dec. 23rd.

Kaibeto to Page Fiber line:

The fiber line from Tonalea to Kaibeto is completed and final preparation is currently in progress. The installation of the fiber line from Kaibeto to NGS (near Page, AZ) is completed; final preparation is in progress. Electric pole upgrade work also continues near the Kaibeto Tower, thereafter the fiber will be installed and expected to be completed mid-October. Enhancing fiber and microwave network enables towers to improve services to those who have mobile phones or enable broadband towers to provide the data needed for distance learning.

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