



2020 CARES Act - NTUA Projects

Progress Report Update #13 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. This report consists of two weeks due to the Thanksgiving holiday schedule.

NTUA expresses deep gratitude to the Navajo Nation Council and the Office of the President and Vice-President for approving and signing Resolution CN-89-20 amending the CARES Act expenditure plans to allow NTUA to extend utility services to more families. NTUA is honored by the confidence the Navajo Nation Leadership has placed in NTUA to extend utilities to more Navajo families to combat the pandemic.

NTUA Progress Report Update #13 CARES Act Projects completed as of December 2, 2020

Electric Connections and Rights of Way Acquisition

NTUA District and Electric Construction Department electric line crews continue to work 10-hour days, including weekends. We kept the crews home on Thanksgiving and Navajo Nation Family Day to spend time with their families and refresh before the final December push. The crews have been working diligently towards the goal of connecting 510 families to the electric grid.

As of this update:

- 428 families are now connected to the electric grid
- 47 homes more homes were connected since November 18th.

Land Acquisition - more families submit applications

- 146 homes still require land acquisition
- 153 projects have been released by NN Land Department moving these projects closer to construction
- 14 Service Line Agreements are pending with NN General Land Development Dept.



NTUA's Off-Grid Residential Solar Program

Field assessment work crews are preparing homes for 3,000 kW solar unit placement. These solar units will only be offered to homes currently not connected to the electric grid.

212 Homes feasible to date

- 143 homes need house-wiring
 - 74 homes - house-wiring completed
- 69 homes are awaiting house-wiring affidavit
- 33 homes belong to Veterans
- 174 homes Solar vendors are working on these sites
 - 12 solar units have been placed at homes



Neighboring Electric Utility Partnerships:

NTUA created partnerships with the neighboring electric service utilities that serve the Navajo Nation to help mitigate the spread of COVID-19. Some families are living beyond the electric distribution service area of NTUA but in close proximity to a powerline of another electric utility provider.

NTUA reached out to our neighboring electric utility providers, which include Arizona Public Service (APS), Jemez Mountain Electric Cooperative (JMEC), Socorro Electric Cooperative (SEC), and Continental Divide Electric Cooperative to develop a meaningful solution.

This is the first time NTUA has established such a partnership with these neighboring electric utilities. NTUA hopes to work with these companies to identify additional homes that may be connected to their electric grids by the December 30th deadline. Progress to date:

Jemez Mountain Electric (JMEC) - 25 planned projects in NM

- 11 homes connected - 3 in Counselor; 5 in Nageezi; 3 in Torreon
- 6 homes are in construction - 3 in Huerfano; 2 in Nageezi; 1 in Torreon
- 8 remaining homes - 2 in Counselor; 1 in Huerfano, 4 in Nageezi ; 1 in Torreon

Arizona Public Service (APS) - 8 planned projects in AZ;

- 4 homes are in Tuba City; 4 homes are in Cameron

Socorro Electric Co-op (SEC) - 1 home confirmed; Alamo Bend (NM)

Continental Divide Electric Cooperative (CDEC) - 14 planned projects in NM

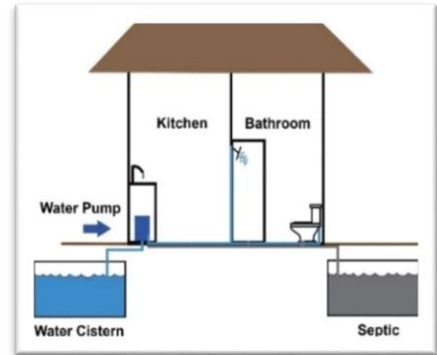
- 9 homes connected - 1 in Baca Prewitt (NM); 1 in Tohajilee' (NM), 1 in Chichiltah (NM), 1 in Littlewater (NM), 1 in Smith Lake (NM), 1 in Thoreau (NM), 3 in Tsayatoh (NM)
- In construction 2 homes - 1 in Baahaali (NM), 1 in Churchrock (NM)
- 3 remaining homes - 1 in Churchrock (NM); 1 in Red Rock (NM), 1 in Tsayatoh (NM)

Electric Capacity Projects

The electric division has completed 29 out of the 59 planned projects. There are 16 projects in construction, including Kinlichee (AZ), Kayenta (AZ), Shiprock (NM), and Mexican Water (UT). Seven (7) more projects are set to begin construction later in December; they are in Fort Defiance (AZ), Crystal (NM), Navajo Mountain (UT), and Chinle (AZ).

Water Cistern Project

The CARES Act is providing funding for cistern water systems where there is no water available and is used for household for drinking water, kitchens and bathrooms. A cistern water system will store 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.



Water/Solar Cistern Units

Completed feasibility surveys on 209 homes

122 families have qualified:

- 69 bathroom foundations have been completed
- 42 out of 120 cistern systems have been installed
- 45 out of 121 septic systems have been installed
- 61 out of 122 homes have electricity
 - 3 were recently connected by NTUA
- 31 out of 122 homes need a solar unit
- 2 out of 122 will have a generator
- 28 out of 122 will be connected to the electric grid

87 Homes were determined not feasible - did not meet requirements. Homes were either abandoned, not structurally adequate or non-existent (burned).



Water Wells & Water System Upgrades

Pump and motor replacements for 55 of 61 water wells have been completed. Well renovations have been completed on 7 of 20 water well projects. Renovations for three major water tanks are planned. Two are scheduled to be completed on December 15th (both are in Fort Defiance AZ). The third is in Newcomb NM and is scheduled to begin renovation on December 7th with a projected completion date of December 23rd.

Construction has started on three new water wells. At the Thoreau, NM, water well, twenty (20%) percent of the final step in the process has been completed and the project has a December 14th completion date. At the Houck, AZ, water well, ninety (90%) percent of the drilling has been completed and the project has a December 30th completion date. At the Ganado, AZ, water supply well (which is pictured to the right), thirty (30%) percent of the drilling and casing has been completed and the project is targeted for completion by December 29th.



Construction to replace 27,000 feet of waterline for the Park Estates project near Sanders, (AZ) is fifty (50%) percent complete.

Water Loading Stations

Repairs and upgrades to six (6) regional watering loading stations have been completed. Four (4) are in Arizona (Bodaway Gap, Leupp, Lupton, Wide Ruins) and two (2) in New Mexico (Torreon and Lake Valley). These watering loading stations are now open for public use.

Construction has begun on nine (9) new water loading stations: seven (7) are in AZ (Cameron, Chilchinbeto, Fort Defiance, Inscription House, Kinlichee Lower Greasewood and Whitecone) and two (2) are located in NM (Crownpoint and Pueblo Pintado). The water loading station in Fort Defiance is in service and open to the public.

The water machines have been installed at Cameron (AZ), Crownpoint (NM), and Lower Greasewood (AZ) and the sites are scheduled to be opened to the public during the week of December 7th. Final work on the Cameron water loading station is pictured to the right.



Water machines are scheduled to be installed the week of December 7th at Kinlichee (AZ) and Whitecone (AZ), the week of December 14th at Inscription House (AZ) and the week of December 21st at Pueblo Pintado (NM).

Construction is underway at five (5) off-line water well sites for water loading stations for water hauling for livestock only. Three (3) are located in AZ (Chinle, Hunters Point and Leupp) and two are located in NM (Newcomb and Sheepsprings). Water machines are scheduled to be installed the week of December 7th at Chinle, Hunters Point and Sheepsprings; the week of December 21st at Newcomb and Leupp. These livestock water loading stations were planned so that residents will not haul water for livestock from potable water sources.

NTUA planned 9 major water system improvement projects and 3 of the 9 have been completed.

Ninety percent (90%) of the Montezuma Creek, UT, arsenic removal water treatment plant has been completed. This project is expected to be completed by December 15th.

Three (3) well replacements have been completed in Tsailé AZ.

Wastewater Facilities Improvements

Engineering services have been procured for renovation of nine (9) wastewater lift stations: 3 in NM - Iyanbito, Navajo, and Coyote Canyon; 6 in Arizona - LeChee, Coalmine, Sawmill, Chinle, Many Farms, and Shonto. 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. Materials are being ordered and scope is being adjusted to ensure completion by December 30th. Four thousand eight hundred (4,800) feet of the Window Rock (AZ) wastewater trunk line will be renovated. Construction began on November 30 and is schedule to run through December 23. The construction of the Pinon (AZ) wastewater lagoon is 80% complete. Construction is scheduled to be completed by December 15th.

Free Student WI-FI Hotspots

Thirty-eight (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. The initial CARES Act target was 31 locations; however, due to increased demand, NTUA and NTUA Wireless will install additional WIFI hotspots. The latest in-service hotspots are at Bodaway/Gap (AZ), KinDa'Lichii (AZ). Installation is in progress for Leupp (AZ), Oaksprings (AZ). Two other locations are being determined.

Telecommunications/Broadband

The upgrade of NTUA fiber optic backbone from 10 Gbps to 100 Gbps remains on schedule. This boost 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. These broadcast stations provide improved internet speeds. These speeds improve internet access for students attending school on-line, employees working remotely from home, and patients and doctors engaging in telehealth. Of the 102 broadcast stations, 98 are uplifts and four (4) are brand new sites:

- 19 of 102 sites are in-service
- 20 of the 102 sites are installed. The testing and verification process is underway.
- 2 of the 102 sites cannot be installed because the tower is not structurally strong enough to support the additional equipment

Multi-segmented Fiber Project - Tuba City (TC)

- The fiber project from the NTUA TC tower to TC High School is currently under construction. Trenching is about 75% complete. The fiber line near TC Fairgrounds to NTUA District Office Tower cannot be constructed until NTUA receives approval from the Hopi. On December 2, the Hopi Tribal Council approved a resolution granting NTUA the ROW, which needs to go to BIA who will issue the ROW. After the ROW is issued, the Notice to Proceed will be issued.
- 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). ROW needs to be acquired by December 11th so that we have enough time to finish the project by Dec. 30th.
- NTUA is also awaiting BIA approval for the fiber build to the TC Regional Hospital. ROW needs to be acquired by December 11th so that we have enough time to finish the project by Dec. 30th. The fiber build to TC Greyhills Academy and TC Plaza fiber builds have received NNLD TAA approval. Both projects have completed 75% of the trenching.

Pinedale, Beclabito, Summit East, and Woodsprings Towers

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.

Tower construction at the Beclabito (NM) is delayed. As crews were drilling the tower foundation, they encountered volcanic rock. It took 30 days longer to complete the drilling than we had originally scheduled. The new target date for completion is January 31st. The installation of the backhaul/broadcast station is now set for February 28th. Meanwhile, NTUA awaits the arrival of building materials for the two remaining towers, which are scheduled to be completed by December 30th.

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 December 15th. Once finished, area residents will notice enhanced services for mobile phones or broadband towers to provide the data needed for distance learning.

For more information contact:
Walter W. Haase, P.E., General Manager, Navajo Tribal Utility Authority
(928) 729-6202; generalmanager@ntua.com

