



2020 CARES Act - NTUA Projects

Progress Report Update #19

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) awarded CARES Act funding to NTUA to construct utility projects eligible under the United States CARES Act by December 28, 2020, with special projects having a completion date of December 30th. Projects that were started and encumbered before December 28th will be completed. NTUA expects to return approximately \$34 million to the Navajo Nation Hardship fund.

This report highlights what has been completed by December 30, 2020. We are still working on multiple projects that have started construction, have been encumbered or have been delayed due to COVID-19 circumstances.

NTUA Progress Report Update #19

CARES Act Projects completed as of January 5, 2021

Electric Connections and Land Acquisition

Up until December 30th, NTUA District and Electric Construction Department electric line crews and electricians worked 10-hour days, including weekends, except for Thanksgiving day, Navajo Nation Family day and Christmas day. NTUA's initial goal was to connect 510 families. Even though we have exceeded this goal by 203 families, we still have over 200 families that applied for CARES Act funding. They have yet to be connected. NTUA has worked with several outside organizations to raise electric construction funds. We have acquired funds to connect about 25 of these families. Next week we will issue a media announcement identifying the generous donors.

As a result of efforts by NTUA and Neighboring Utilities:

- 717 families are now connected to the electric grid
- 665 families by NTUA Crews
- 52 families by neighboring utility crews
- 4 homes more homes than reported in Update #18
- 3 by JMEC and 1 by NTUA

Families are still submitting applications, update on the NN land acquisition approval

- 187 homes that still require land acquisition
- 47 homes are more than one mile from an NTUA existing electric distribution line
- 180 projects have been released by NN Land Department (NLD) clearing the way for electric line crews to proceed with construction
- 15 SLA (Service Line Agreements) are pending with NN General Land Development Dept.



NTUA's Off-Grid Residential Solar Program

Work crews are preparing homes for a 3,000 kW solar unit placement. NTUA will be distributing 300 units, 40 units are designated for the homes of U.S. Military Veterans, and 33 units are assigned for the Water Cistern Projects as described below. These solar units were offered to homes currently not connected to the electric grid.

299 Homes feasible to date

- 205 homes need house-wiring
 - 64 homes - house-wiring under construction
 - 141 homes - house-wiring is complete
 - 94 homes - do not need house-wiring
 - 80 homes - have the house-wiring affidavit
 - 14 homes - are awaiting the house-wiring affidavit
- 39 homes belong to U.S. Veterans
- 299 homes have been released to the Solar vendors
 - 280 are under construction
 - 16 are in Phase I of the construction process
 - 102 are in Phase II of the construction process
 - 95 are in final stages of construction awaiting commissioning
 - 49 homes have been commissioned and are operating



Neighboring Electric Utility Partnerships

NTUA created partnerships with neighboring electric utilities that serve the Navajo Nation to help mitigate the spread of COVID-19. Navajo families are living beyond the reach of NTUA's electric distribution system and their homes are in close proximity to a powerline of another electric utility provider.

NTUA reached out to the neighboring electric utility providers, which include Arizona Public Service (APS), Continental Divide Electric Cooperative (CDEC), Jemez Mountain Electric Cooperative (JMEC), and Socorro Electric Cooperative (SEC), to develop a meaningful solution for these families. This is the first time NTUA has established this type of partnership with these neighboring electric utilities.

- **Jemez Mountain Electric Cooperative (JMEC)**
24 planned projects in (NM)
 - 22 homes connected - 6 in Counselor; 3 Huerfano; 9 in Nageezi, 4 in Torreon
 - 2 homes - released to construction - 2 Torreon
- **Continental Divide Electric Cooperative (CDEC)**
24 planned projects in (NM) - all projects completed
 - 24 homes connected - 1 Baahaali, 3 Baca Prewitt;
 - 1 Chichiltah, 4 Churchrock, 1 Littlewater, 1 Red Rock,
 - 1 Rock Springs, 2 Smith Lake, 2 Thoreau, 3 Tohajilee', and 5 Tsayatoh
- **Arizona Public Service (APS) - 5 homes connected in (AZ)**
 - 2 homes connected in Tuba City; 3 homes connected in Cameron
- **Socorro Electric Cooperative (SEC) - 1 home planned in Alamo Bend (NM)**

Electric Capacity Projects

As of December 30th, the NTUA electric division completed 120 out of the 151 projects. No additional projects were completed since Update #18.

The remaining 31 projects are all expected to be completed by end of May 2021. Twenty-four (24) are expected to be completed by the end of January. Three (3) are expected to be completed in February, March and April. One (1) project is expected to be completed by the end of May.

The capacity projects are strengthening system reliability and adding capacity to the electric system to help prevent and combat the spread of COVID-19.

Water Cistern and Septic Projects

The CARES Act is providing funding for cistern water systems where there is no water available 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, septic tanks, a power system, including building a bathroom addition and plumbing, if necessary.

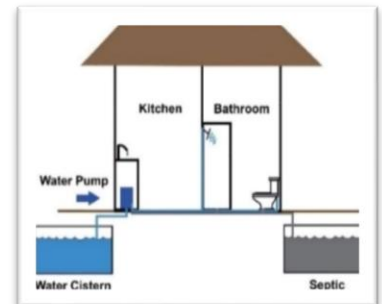
All 122 Water Cistern and Septic projects have been started, encumbered and/or delayed by COVID-19 issues. It would be unfair to these families if we started construction on their homes and did not finish the work.

Water Cistern, Septic and Power Systems:

122 Families have qualified:

- 80 Projects out of 122 have been completed
- 47 out of 82 bathroom additions have been completed
- 79 out of 118 cistern systems have been installed
- 76 out of 115 septic systems have been installed
- 77 out of 122 homes to receive electricity from NTUA
 - 77 are connected to NTUA system
 - 20 were recently connected
- 32 out of 122 homes need a solar unit
 - 14 Solar units are in operation
- 45 out of 45 will have a generator installed

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



Water Line Connections and Septic Installations to Homes

NTUA has completed twenty-seven (27) water line connections and twenty-five (25) septic systems. Two (2) homes had existing septic systems. We have started construction on three (3) additional homes, which have been delayed due to COVID-19 issues. We expect to complete these three homes by January 15th. We have identified another thirty (30) homes in need of systems. We will be looking for funding sources to get these additional thirty (30) homes served.

Water Wells & Water System Upgrades

Pump/motor replacements for 64 of 64 targeted water wells have been completed. Water Well renovations have been completed on 8 of 20 targeted renovations. Three (3) well pump replacements have been completed in Tsaille (AZ).

Renovations for two (2) of the three (3) major water tanks are close to completion. The Newcomb (NM) was completed on Dec. 27th. Work on the two (2) remaining water tanks has been delayed due to COVID-19 issues.

The Fort Defiance (AZ) tank is now scheduled to be completed on January 15th and the Sawmill (AZ) is now scheduled to be completed Jan 22nd.



Construction of all three (3) new water wells sites has been completed. The Ganado (AZ) and the Thoreau Sonsela (NM) wells have been completed. The Thoreau well project also included installation of a Well Pump at the nearby Thoreau Baca San Andres Well which was installed on Dec. 22nd. The Houck (AZ) well site was completed December 30th.

Construction to replace 27,000 feet of waterline for the Park Estates project near Sanders (AZ) Phase I & II have been completed. Phase III is approximately 8,100 feet of line was under construction, encumbered and delayed to COVID-19 issues. This phase is expected to be completed Jan. 8th.

Water Loading Stations/Major Water System Improvement projects

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

Construction has completed on all 9 of new water loading stations which include 7 in AZ: Cameron, Fort Defiance, Greasewood Springs, Kinlichee, Whitecone, Chilchinbeto and Inscription House. Construction is complete at the 2 (two) NM stations: Crownpoint and Pueblo Pintado.

NTUA has constructed 5 livestock water loading stations. Construction is complete at all of them. Three are in AZ, located in Hunters Point, Leupp, and Chinle. Two are in NM, located at Newcomb and Sheepsprings. These livestock water loading stations were constructed so that residents would not haul water for livestock from potable water sources.



Cont'd Water Loading Stations/Major Water System Improvement projects

NTUA has completed 8 of the 10 major water system improvement projects. Three projects were completed in AZ: Chinle, Kinlichee and Navajo; four projects were completed in NM, two in Church Rock, one Iyanbito and one in Ojo Encino: one in Utah in Mexican Hat. We have three projects that are under construction, encumbered and/or delayed due to COVID-19 circumstances. One is in Lower Greasewood (AZ). Three are located in NM - two in Ojo Encino, and one in Torreon. They are all expected to be completed by January 8th. The Montezuma Creek, UT arsenic removal water treatment plant has been completed and commissioned.

Wastewater Facilities Improvement

4,800 feet of the Window Rock (AZ) wastewater trunk line will be renovated. Phase I of this project has been completed. Phase II has been delayed due to COVID-19 issues and is scheduled to be completed by Jan. 11th. The Pinon (AZ) wastewater lagoon was commissioned on Dec. 15th. The two Shiprock wastewater lift station motors were replaced.

Free Student WI-FI Hotspots

Forty two (42) 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 added more free hotspots. LeChee (AZ) and Oaksprings (AZ) were the last two sites installed.

Telecommunications/Broadband

The upgrade of NTUA fiber optic backbone from 10 Gbps to 100 Gbps was placed in service. 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 that the Navajo people deserve, especially the students/teachers attending school on-line, employees working remotely from home, and patients/doctors engaging in telehealth.

Of the 102 broadcast stations, 98 are uplifts and four (4) are brand new sites:

- 82 of 102 sites are in-service
- 4 of the 102 sites cannot be installed because the tower is not structurally strong enough to support the additional equipment

Pinedale, Beclabito, Summit East, and Woodsprings Towers

Construction on three of the four towers is now complete. The Pinedale tower was completed and commissioned October 12th. The Summit East and Woodsprings towers were recently completed and dedicated by tribal leaders. They are also operational.

Construction at the Beclabito (NM) is delayed because of terrain. As crews were drilling the tower foundation, they encountered volcanic rock, changing the original schedule. The new target date for completion is January 15th. The installation of the backhaul/broadcast station is now set for January 22nd. NTUA has installed a temporary COW (Cellular-on-wheels) to accommodate network traffic until the permanent tower is operational.



Multi-segmented Fiber Project - Tuba City (TC)

The primary backbone fiber construction from TC Tower to Pasture Canyon is nearly complete. NTUA received the notice to proceed with construction from the Hopi Tribe and immediately informed NTUA contractors to complete the remaining fiber optic construction.

In addition to acquiring Hopi approval, NTUA received all the requisite authorizations from the Bureau of Indian Affairs (BIA) to commence with providing connectivity to the following anchor institutions. Certain parts of this project were under construction, encumbered and/or delayed by COVID-19 issues.

Projects completed on December 24th:

- NTUA fiber pole to NTUA Tuba City District Office Tower
- Tuba City High School is up and in service

Projects completed by December 29th

- Tuba City Plaza
- Two Grey Hills Academy

Projects expected to be completed by January 7th

- JR High School
- Elementary School
- Tuba City Regional Health Care hospital

Project expected to be completed by January 29th

- TC Boarding School

Kaibeto to Page Fiber line

The fiber line from Tonalea to Navajo Generating Station (outside Page, AZ) has been completed. Electronics and shelters are operational. The remaining task is for NTUA to make the final cross-connect at the Comnet splice point which includes 300 feet of fiber pull and splicing. 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

