



2020 CARES Act - NTUA Projects

Progress Report Update #16 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. NTUA has mobilized to complete as many projects as possible.

Neighboring utility partner completes electric connection projects

We officially thank one of our neighboring utilities for connecting all of the homes they had planned to connect to their electric distribution system. Continental Divide Electric Cooperative (CDEC) has met its pledge to energize 24 homes. Great job! Upon sending word of completed projects, CDEC wrote - "We have made our communities better places to live and forged a stronger relationship with our neighbor - NTUA."

Our other neighbors, Jemez Mountain Electric Cooperative (JMEC) is close to completing its 24 projects, Arizona Public Service (APS) has also connected four homes. Please see page 2 for details. What started out as an idea came to fruition when neighboring utilities agreed to work together to help to combat the spread of COVID-19 and NTUA allocated part of its CARES Act funding to the utilities in order benefit families living without electricity.

NTUA Progress Report Update #16 CARES Act Projects completed as of December 23, 2020

Electric Connections and Land Acquisition

As the December 28th deadline approaches, NTUA District and Electric Construction Department electric line crews and electricians continue to work 10-hour days, including weekends. While we have exceeded the initial goal to connect 510 families we will continue to work to connect as many families as possible before the deadline.

As a result of efforts by NTUA crews:

- 583 families are now connected to the electric grid
- 42 homes more homes than reported in Update #15

More families submit applications, needing NN land acquisition approval

- 147 homes that still require land acquisition
- 169 projects have been released by NN Land Department (NLD) clearing the way for electric line crews to proceed w/construction
- 26 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 will only be offered to homes currently not connected to the electric grid.



298 Homes feasible to date

- 205 homes need house-wiring
 - 194 homes - house-wiring underway
 - 127 homes - house-wiring completed
 - 93 homes are awaiting house-wiring affidavit
- 39 homes belong to U.S. Veterans
- 279 homesteads – Solar vendors are working on these sites
 - 254 solar units have been placed at homes
 - 238 homes are awaiting final stages of construction
 - 42 in final stages of construction awaiting commissioning
 - 22 homes commissioned/operating

Neighboring Electric Utility Partnerships

NTUA created partnerships with the neighboring electric utilities that serve the Navajo Nation to help mitigate the spread of COVID-19. These families are living beyond the reach of NTUA's electric distribution, but are 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), 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)

- 19 homes connected - 4 in Counselor; 2 Huerfano; 9 in Nageezi, 4 in Torreon
- 4 homes - released to construction - 1 Counselor; 1 Huerfano, 2 Torreon
- 1 home in construction - 1 Counselor

➤ **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 planned projects in (AZ)**

- 2 homes connected in Tuba City; 2 homes connected in Cameron

➤ **Socorro Electric Cooperative (SEC) - 1 home planned in Alamo Bend (NM)**

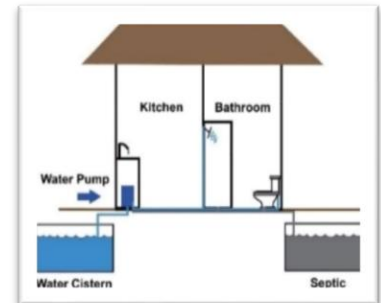


Electric Capacity Projects

The electric division has completed 108 out of the 151 projects, this includes the additional projects allowed under the NN extension. NTUA has determined that 25 projects will not be finished by Dec. 30th. Eighteen (18) projects are under construction: nine (9) projects are expected to be completed by December 28th and nine (9) projects are anticipated to be finished by December 30th. 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, power system and plumbing systems, including building a bathroom addition and plumbing, if necessary.



Water Cistern, Septic and Power Systems:

122 Families have qualified:

- 31 out of 72 bathroom additions have been completed
- 101 out of 120 cistern systems have been installed
- 99 out of 121 septic systems have been installed
- 89 out of 122 homes to receive electricity from NTUA
 - 72 out of 122 are connected to NTUA system
 - 18 were recently connected
 - 16 are planned to be connected
- 31 out of 122 homes need a solar unit
 - 10 Solar units are in operation
- 29 out of 33 will have a generator installed
- 22 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 down)

Water Line Connections and Septic Installations to Homes

NTUA has completed 19 out 20 water line home connections to the NTUA water distribution system and installed 17 out of 19 septic systems required to support these connections. Two (2) homes had existing septic systems. We expect to connect 3 more homes (including septic systems) by Dec. 28th for a total of 22 homes.

Water Wells & Water System Upgrades

Pump/motor replacements for 61 of 63 water wells have been completed. Well renovations have been completed on 8 of 20 water well renovations projects. Three (3) well pump replacements have been completed in Tsaille (AZ).

Renovations for three major water tanks are close to completion. Two are scheduled to be completed on Dec. 26th (Fort Defiance & Sawmill, AZ). The third in Newcomb (NM) is also scheduled to be completed on Dec. 30th.

Construction has been completed on two of three new water wells sites. The Houck (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. At the Ganado (AZ) well site one hundred (100%) percent of the drilling/casing is scheduled to be completed on Dec. 28th.

Construction to replace 27,000 feet of waterline for the Park Estates project near Sanders (AZ) phase one is complete and phase two is also 95% percent complete. The meter connections are expected to be completed on Dec. 28th. Thirty (30%) of phase three has been completed, this phase has a Jan. 8th completion date.

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 will not haul water for livestock from potable water sources.

NTUA has completed 7 of the 10 major water system improvement projects. Three projects were completed in AZ: Chinle, Kinlichee and Navajo; three projects were completed in NM, two in Church Rock and the other in Iyanbito and one project in Utah in Mexican Hat.

We expect to complete 11 projects by Dec. 30th. One is in AZ in Lower Greasewood. Three are located in NM - two in Ojo Encino, and one in Torreon.

The Montezuma Creek, UT arsenic removal water treatment plant has been completed and commissioned.



Sheepsprings Livestock Water Loading Station

Wastewater Facilities Improvement

4,800 feet of the Window Rock (AZ) wastewater trunk line will be renovated. Construction began on November 30 and run through December 30. The Pinon (AZ) wastewater lagoon was commissioned on Dec. 15th. The two Shiprock wastewater lift station motor were replaced.

Free Student WI-FI Hotspots

Forty (40) hotspots have been connected in various communities throughout the Navajo Nation and forty-two (42) total will be installed. 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 installed additional hotspots. Leupp was put in service Dec. 22nd. The latest hotspots close to be completed are in LeChee (AZ), and Oaksprings (AZ).



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:

- 76 of 102 sites are in-service
- 82 of 102 broadcast stations are expected to be operational by Dec. 28th
- 4 of the 102 sites cannot be installed because the tower is not structural 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.

Photo right: On December 22nd, NN President Jonathan Nez and NN Council Delegate Vince James (both center of photo) cut the ribbon at a small dedication ceremony for the Woodsprings tower.



Construction at the Beclabito (NM) is delayed because of terrain. As crews were drilling the tower foundation, they encountered volcanic rock and it changed our original scheduled. The new target date for completion is January 15st. 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. All Tuba City sites including the following shall be operational by December 30th.

Sites completed December 24th:

- Tuba City Tower is up and in service
- Tuba City High School is up and in service

Sites that will be done by Dec 28

- Tuba City Plaza
- GreyHills Academy
- JR High School
- Elementary School
- TC Boarding School
- Tuba City Regional Health Care hospital

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:

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