



GTC BURNT CHURCH-TRADEPORT 115KV TRANSMISSION LINE

PROJECT TYPE

Transmission

SCOPE

12.2 miles of 115kV transmission line
with distribution underbuild

LOCATION

Brunswick, GA

CLIENT

Georgia Transmission Corporation

CONSTRUCTION START

2012

COMPLETION YEAR

2013

Irby Construction built a majority of this line along environmentally sensitive terrains of the coastal salt marsh along I-95. To accomplish this, we used an Erickson Air Crane helicopter to haul each pole base into the marsh and special equipment vibrated them into the ground within minutes. Then, the same helicopter aligned and mounted the tops of the poles on each base. We successfully completed this project on schedule using this innovative technique.

To see more on this project, watch the video at www.irbyconst.com produced by Georgia Transmission on the project.





IID MASTER SERVICE AGREEMENT

PROJECT TYPE

Transmission, Substation, Distribution

SCOPE

Continuing transmission, distribution, substation and underground work in the Imperial, California area. Scope of work also includes maintenance work thru 230kV (system wide).

LOCATION

Imperial, CA

CLIENT

Imperial Irrigation District

CONSTRUCTION START

1980

COMPLETION YEAR

Present

Irby Construction Company has worked for IID for over 25 years providing ongoing transmission, distribution, substation and underground electric distribution work in the Imperial, CA area.

With our many years in Imperial and Riverside Counties, we have hired and trained local personnel, giving support to the local economy. We also continue to support local charities and groups in support of our employees and the community. Our commitment to both IID and the community has strengthened us as a company.





KENTUCKY UTILITIES 345KV OHIO RIVER CROSSING

PROJECT TYPE

Transmission

SCOPE

2.42 Miles of 345kV, (2) 420ft lattice towers

LOCATION

Bedford, KY

CLIENT

Kentucky Utilities

CONSTRUCTION START

2009

COMPLETION YEAR

2009

Irby Construction Company and Can-Fer Utilities completed the Trimble County - PSI Ohio River Crossing job for Kentucky Utilities in 2009. This project consisted of 2.42 miles of 345kV double circuit line including the installation of two (2) 420 ft. river crossing lattice towers.

IRBY lead the project management with structure and wire installation. Can-Fer was utilized as a subcontractor on this project for the pier foundations (other than the river crossing towers). The foundations for the river crossing towers were installed by a third party subcontractor contracted by the owner.





NU ELIOT SWITCHING STATION – 345KV SWITCHYARD

PROJECT TYPE

Substation

SCOPE

345kV Switching Station

LOCATION

Eliot, ME

CLIENT

Northeast Utilities

CONSTRUCTION START

2012

COMPLETION YEAR

2013

Irby Construction Company built Eliot Substation as part of an EPC coalition of Quanta Services firms including Dashiell Engineering and Real-time Engineering.

Eliot Substation was a new greenfield station, located in Eliot, ME. This station is comprised of a 345kV switchyard, with a three-line double breaker ring bus configuration and new control house. The design for the new substation connected the existing 345kV Newington-Deerfield 307 line, located in New Hampshire, to the Central Maine Power (CMP) System.

At project completion, there were three new 345kV line terminals constructed at Eliot Substation; #307 from Deerfield, #3176 from Newington, and #3022 to Maguire Road.





BEPC PATENT GATE 345/115KV SUBSTATION

PROJECT TYPE

Substation

SCOPE

Greenfield construction of a 345/115kV substation including installation of ground grids, conduit systems, cable trench, concrete foundations, steel structures and electrical bus work. Installation of all major equipment including power circuit breakers, instrument transformers, and disconnect switches at 171 acre site

LOCATION

Arnegard, ND

CLIENT

Basin Electric Power Cooperative

CONSTRUCTION START

2015

COMPLETION YEAR

Present

Basin Electric identified the need for additional electric transmission capacity in northwestern North Dakota as a result of increased demand, and to meet reliability and system stability requirements for the region. To resolve these issues, Basin Electric will construct, own and operate a new 345kV transmission line and associated supporting infrastructure including the Patent Gate Substation.

A live feed of this project in progress can be viewed via www.irbyconst.com/patent-gate.





THE SOUTHERN LOOP – 345KV TRANSMISSION LINE

PROJECT TYPE

Transmission

SCOPE

53 miles of 345kV and 115kV

LOCATION

Vermont

CLIENT

Vermont Transco, LLC

CONSTRUCTION START

2009

COMPLETION YEAR

2010

Irby Construction Company was a subcontractor to Cianbro on the construction of 345kV transmission line for the Southern Loop project including installation of a new 345kV transmission line and relocation of existing 345kV and 115kV interconnection lines. This project totaled 53 miles of which Irby installed approximate 25 miles of conductor and fiber. The project included direct embedded wood H-frame structures, steel mono-pole structures on anchor bolt foundations, twin bundled 954 ACSR conductor and two OPGW static lines.





GPC THOMSON-VOGTLE 500KV TRANSMISSION LINE

PROJECT TYPE

Transmission

SCOPE

47.08 miles, 500kV

LOCATION

Augusta, GA

CLIENT

Georgia Power Corporation

CONSTRUCTION START

2015

COMPLETION YEAR

Present

Irby Construction was awarded construction of a new 47.08 mile, 500kV transmission line for Georgia Power along existing ROW. The line will carry 1113 45/7 ACSR (Bluejay) conductor and utilize 2-7#8 AW shieldwire.

The Thomson-Vogtle 500kV transmission is being built to add the necessary transmission infrastructure to support two new nuclear units. The total line route is 55 miles long beginning at Plant Vogtle in Waynesboro, GA ending at the Thomson Primary substation in Tomson, GA. The transmission line will be in service by 2018.





NEXTERA HORSE HOLLOW-KENDALL 345KV TRANSMISSION LINE

PROJECT TYPE

Renewables, Transmission

SCOPE

235 miles of 345kV,
12 miles of 138kV

LOCATION

Brady, Texas

CLIENT

Horse Hollow Generation Tie, LLC

CONSTRUCTION START

2009

COMPLETION YEAR

2009

This project was developed by NextEra Energy in order to transmit clean energy from their five wind farms in the Abilene area to the San Antonio area. The 345kV transmission line was 235 miles with an additional 13 miles of 138kV.

Irby served as prime contractor and provided project management services for five Quanta Services companies including North Houston Pole Line, Dillard-Smith, Dashiell Engineering and Can-Fer Utilities.

Irby crews installed over 600 concrete, steel and hybrid poles, and strung over 90 miles of bundle conductor. This project was completed in a record time of just nine months.





LCRA CLEAR SPRINGS-HUTTO 345KV TRANSMISSION LINE

PROJECT TYPE

Transmission

SCOPE

160 miles of 345kV

LOCATION

Hutto, Texas

CLIENT

Lower Colorado River Authority

CONSTRUCTION START

2009

COMPLETION YEAR

2011

Irby Construction Company teamed up with Can-Fer Utilities to carry out the Clear Springs to Hutto Project for the Lower Colorado River Authority. The project consisted of 88 miles of 345kV new transmission line construction with approximately 160 circuit miles of bundled, 959.6 ACSS/TW "Suwannee" conductor on lattice towers and steel poles. Engineering was provided by the owner.

Irby has worked continuously for LCRA for the past 10 years, during which we have built over 1,000 miles of 138kV and 345kV lines on the LCRA system.





GTC THOMAS-WARTHEN 500KV TRANSMISSION LINE

PROJECT TYPE

Transmission

SCOPE

38.75 miles of 500kV

LOCATION

Gibson, GA

CLIENT

Georgia Transmission Corporation

CONSTRUCTION START

2009

COMPLETION YEAR

2010

Irby Construction Company built 38.75 miles of 500kV line for Georgia Transmission. This project crossed over several high voltage transmission lines and included installing 157 lattice steel towers on reinforced concrete pier foundations.

Irby worked on this project in conjunction with Reliable Constructors, Inc. and together we were able to complete the job six (6) months ahead of schedule.





CREZ 345KV TRANSMISSION PROJECTS

PROJECT TYPE

Transmission

SCOPE

~1,000 miles of 345kV
(with small portions of 138kV)

LOCATION

Central Texas

CLIENT

Electric Transmission Texas (ETT)
Lower Colorado River Authority (LCRA)
Lone Star Transmission, LLC
Sharyland Utilities
South Texas Electric Cooperative (STEC)

CONSTRUCTION START

2011

COMPLETION YEAR

2014

CREZ projects were primarily designed to move electricity generated by renewable energy sources (primarily wind) from remote parts of Texas (i.e., West Texas and the Texas Panhandle) to the more heavily populated areas of Texas (e.g., Austin, Dallas-Fort Worth, San Antonio). Several of these lines provide transmission infrastructure necessary to meet the long-term needs of the growing area west of the I-35 corridor between San Antonio and Killeen.

Approximately 2,400 miles of electric transmission line were ordered by the Public Utility Commission of Texas (PUCT) and awarded to 10 transmission service providers. Irby Construction Company provided transmission construction services to five of those service providers: Electric Transmission Texas, Lower Colorado River Authority, Lone Star Transmission, Sharyland Utilities and South Texas Electric Cooperative. As a prime contractor for several Quanta companies, Irby collectively built ~ 1,000 miles of line.

The majority of the lines were 345kV, with small portions of 138kV throughout the paths.





MAINE POWER RELIABILITY PROGRAM (MPRP)

PROJECT TYPE

Transmission

SCOPE

200 miles of 34.5kV, 115kV, and 345kV

LOCATION

Lewiston, ME

CLIENT

Central Maine Power

CONSTRUCTION START

2000

COMPLETION YEAR

2015

Irby Construction was awarded the contract for the Central Loop of Maine Power Reliability Program (MPRP) for Central Maine Power Company in December 2010. The MPRP Central Loop consisted of 230 miles of installation, modification and/or removal of 345kV and 115kV electric transmission lines. With work in 13 of Maine's 16 counties, the MPRP is the largest construction project in the state's history.

This project consisted of twenty separate sections and segments with separate Milestone Completion Dates for each section/segment. Irby Construction successfully met all Milestone Completion Dates, as well as all outage dates. The project included the removal of lattice towers and construction of new lattice towers on several major river crossings. Approximately 30,000 timber mats were used to build roads on the ROW to safeguard the Maine environment.

Construction was completed on schedule with the contractual completion date in August 2015. Burns and McDonnell served as the program manager for this project, and engineering on the project was provided by owner. This project could not have been such a success without the help of its subcontractors. Irby Construction subcontracted the scope to a Joint Venture between Irby and Cianbro Corporation, a Maine company. Other various subcontractors such as Winco and Crux Subsurface, Inc., Quanta Services companies, assisted the JV with foundation installation, helicopter support, fiber splicing and testing, blasting, surveying and lead abatement.





CTT GRAY TO ALLEN CREEK 345kV TRANSMISSION LINE

PROJECT TYPE

Transmission

SCOPE

24 miles of 345kV

LOCATION

Pampa, Texas

CLIENT

Cross Texas Transmission (CTT)

CONSTRUCTION START

January 2016

COMPLETION YEAR

August 2016

Irby Construction was awarded the CTT Gray to Allen Creek Transmission Line project in January of 2016. The scope consisted of constructing approximately 25 miles of single circuit 345kV transmission line. This required the installation of double bundled conductors, one static and one OPGW accompanied by all necessary insulating hardware and spacing. CTT built this line to integrate additional wind energy resources from the Salt Fork Wind project in Gray and Donley Counties.

The conductor is supported by mostly single pole weathered steel structures mounted onto drilled piers or direct embedded into concrete backfill. The requirements of the project included assembly of an experienced construction administration team, comprehensive quality control planning, managed material inventory and control program, earthwork, erosion control with monitoring, protection of critical habitats of endangered species, and precise project execution.

Several subcontractors played an important role in making the Gray to Allen Creek project a success. Aldridge Construction, Inc. performed the direct embed drilling and setting bases of the structures. Winco, Inc. assisted with wire operations by installing leadline and bird diverters, and B&M Telecom, Inc. performed fiber splicing for this project.





AEP VALLIANT TO NORTHWEST 345kV TRANSMISSION LINE

PROJECT TYPE

Transmission

SCOPE

43.5 miles of 345kV

LOCATION

New Boston, Texas

CLIENT

American Electric Power (AEP)

CONSTRUCTION START

April 2016

COMPLETION YEAR

January 2017

Irby Construction was awarded the contract for the construction of the Valliant to Northwest Texarkana Transmission Line project for AEP Southwestern Electric Power Company (SWEPCO) and AEP Oklahoma Transmission Company near New Boston, Texas.

The Valliant-Northwest Texarkana Transmission Line project consists of installing 43.5 miles of 345kV single steel pole transmission line on anchor-bolted foundations that have previously been installed under another contract. This is the Texas portion of a larger 78.7 mile project that also included 35.2 miles in Oklahoma constructed by another contractor. The project is new single circuit construction with poles that are double circuit capable with steel arms only installed on one side of the poles.

This project was identified and mandated as a priority project by Southwest Power Pool (SPP) to connect an existing Public Service Company of Oklahoma substation to an existing SWEPCO substation in Texas. The transmission line goes from Valliant in McCurtain County, Oklahoma to Northwest Texarkana in Bowie County, Texas.

Several subcontractors have played an important role in making the Texarkana Project a success. Irby Construction used Erickson Air Crane to erect poles with a heavy-lift helicopter as well as Winco, Inc., a subsidiary of Quanta Services, Inc., to provide helicopter erection.

