



# CASE STUDY

## HURRICANE IRMA AFTERMATH

### TOO MANY GROUND STRAPS- NOT ENOUGH RESOURCES

## THE SITUATION



Every utility has to deal with temporary cables that are installed above ground because an underground cable has failed. These provi-

sional cables are also known as "secondary ground straps", which connect homes and businesses to transformers.

After the massive category 3 and 4 hurricane Irma hit Florida, the number of ground straps tripled. Crews were working very hard trying to get customers' power restored as quickly as possible, but leaving cables above ground is a hazard. They could get hit with mowers, covered with vegetation, or fall from the trees through which they are strung. The more of these ground straps out in the field, the higher the risk of an incident occurring.

Additionally complaints were pouring in to the utility by customers wanting to know when these ground straps would be removed and a permanent fix put in their place. The Florida Public Service Commission also exerted pressure on the utility to address the situation. The back log had reached serious proportions from the utilities' most Northern Counties to the West Coast of Florida and all the way down South to Miami Dade County. This is an extremely large geographical area. Internal resources and local contractors were stretched thin, so Infratech Corporation was engaged to help.

## THE SOLUTION

Known to react quickly to critical needs, Infratech mobilized 100 additional resources to address the utility need. This included 10 drill crews and 12 line crews within a period of 1-2 weeks. By staggering the drillers and the linemen there was no downtime for any crews, resulting in a very effective and efficient work flow.

In all, 1,000 ground straps were replaced using 2" conduit. Each ground strap was 120' on average. That meant moving people, tools and equipment constantly to new locations. Soil conditions were rocky so progress was slower. Crews encountered all sorts of obstacles. In some cases, they had to remove decks, circumvent pools, fences, patios, trees



and cut concrete to re-connect the home or business to the grid. Residents and merchants appreciated not having to deal with cables snaking over their properties and parking lots.

Coordinating all the moving parts was like putting together a giant puzzle, but with great cooperation and solid planning the project was executed on an aggressive timeline.

## THE RESULT

12,000' of cables were replaced and energized within five months from October 2017 to March of 2018. There were zero safety events. Since Infratech is very familiar with the utility systems in Florida, we were able to take on most of the planning, permitting and completion reporting required by the utility.

Close communication and excellent coordination resulted in impressive response times and a very effective and efficient process. There is still a backlog of ground straps in Florida but the number is down to much more manageable levels.

**TO FIND OUT MORE ABOUT SOLUTIONS WE HAVE FOUND FOR COMPLEX CHALLENGES AND CRITICAL SAFETY ISSUES, CONTACT STEVE MITCHELL AT 770-826-2827 OR SMITCHELL@INFRATECHCORP.COM**