



## TRANSMISSION-LINE CATEGORY

2021 Annual Conference & Trade Show

### ENTERGY

#### Entergy Hurricane Laura Restoration

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Hurricane Laura will go down in the record books as the strongest storm to hit Louisiana since 1856 and has tied for the fifth strongest to make landfall in the continental U.S. At peak, more than 558,000 Entergy Louisiana and Entergy Texas customers experienced outages across our service area. The damage from Laura's historic intensity caused catastrophic damage to the Entergy system across Louisiana and Texas. The eye wall, which brings the most damaging winds and intense rainfall, passed directly over Lake Charles, Louisiana on Aug. 27 as a catastrophic Category 4 hurricane with maximum sustained winds of 145 mph. It continued as a Category 2 hurricane, still maintaining nearly 110 mph sustained winds, as it moved inland and northward across the service territory. As the storm moved through the Entergy System it caused substantial damage to transmission and distribution facilities.



As assessment reports began rolling in and the damage count piled up, it was clear the company had a long road ahead. Laura left 225 lines out of service and over 1,900 structures damaged with over 1,300 transmission poles of all voltages destroyed. The task of rebuilding the bulk electric system would be as arduous as it would be complex. Not only was the system severely damaged near neighborhoods, homes and businesses, but it was also severely damaged in hard-to-access locations like swamps, rivers, woods and the intracoastal waterway. From day one of damage assessments through the installation of the final transmission structure, each day brought forth unique challenges. Because of the extensive damage, a massive coordination effort between asset management, planning, engineering, project management, supply chain, construction, and project controls was needed to execute the daily tasks. There are seven transmission line corridors feeding into the Lake Charles area, five of which belong to Entergy. All seven were catastrophically damaged, and it was some of the most severe damage the company has experienced in a weather event.



Without a source feeding into Lake Charles, Entergy had to react fast to develop a design and construction plan that would strategically bring back key transmission lines to provide load to the area. This started with repairing key tie lines that tied the Louisiana and Texas grids together. Entergy deployed the largest restoration effort ever mobilized in company history with more than 26,000 workers in total from 34 states, 2,700 of which were transmission line resources – amid a worldwide pandemic.