



2022 Edith Clarke – Riley 345kV F3 Tornado Restoration

August 2022 ERCOT OWG Mtg

Edith Clarke to Riley Tornado Restoration

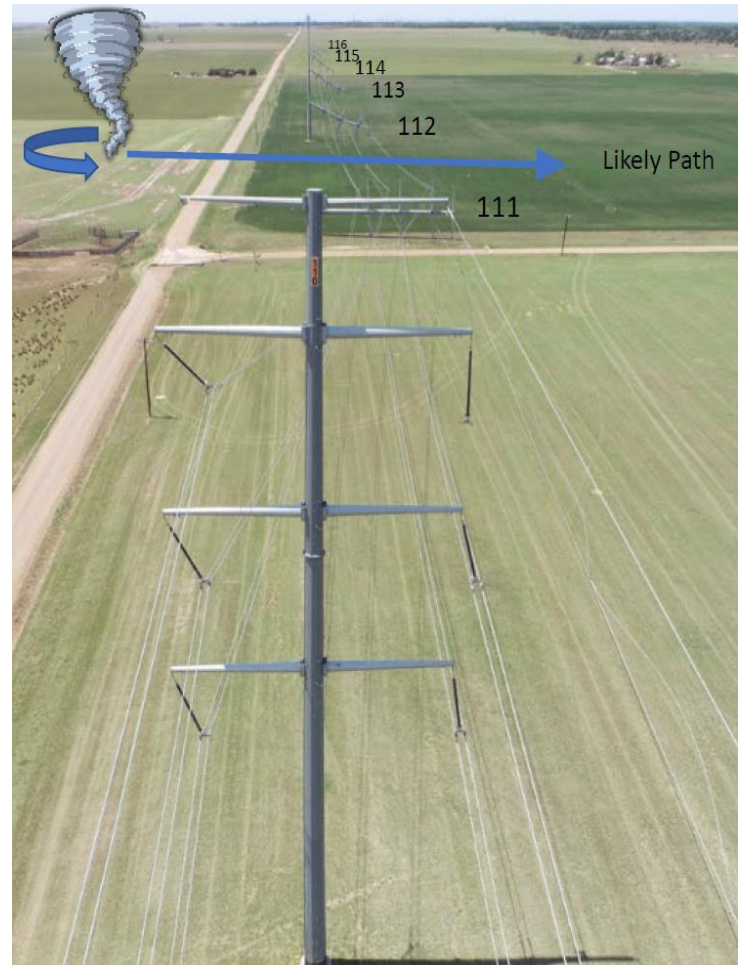
- EF3 Rated Tornado Wind Speed 136-165mph
- 7 Structures failed catastrophically
- Detailed analysis of non-catastrophic failures
- Spare Equipment sourced from 4 states across AEP service territory
- 20-mile storm track
- 5 miles of transmission damaged



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Timeline & Schedule

- May 4 – EF3 Tornado Strikes
- May 6 – Debris Clearing/Load Restoration
- May 9 – Damage/Spare Parts Assessment
- May 16 – Replacement Design/Parts Delivery
- May 18 – Drill and Pour Foundations
- May 25 – Begin Pole Framing/Installation
- May 31 – Begin Wire Repair
- June 21 – Begin Wire Replacement
- June 30– Return to Service



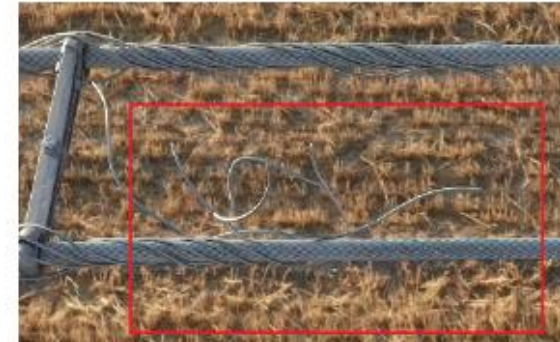
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- **Detailed inspections required to determine extent of damage**

Transmission Line Damage Summary – South Circuit

Line Segment

119 to 118: Damage various locations along span



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Restoration Challenges

- **20-40 person field crew working double-time**
- **Flooding**
- **High Winds**
- **400,000ft of conductor inspected and repaired**
- **100,000ft of conductor replaced**



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Outage Scheduling

UPDATED_DATE	PLANNED_END	ACTUAL_END	Purpose for Update	Comments
2022-05-04T21:59:10-0500	2022-05-05T16:00:00-0500		initial forced outage report	pre project management engagement
2022-05-05T16:05:28-0500	2022-05-20T16:04:00-0500		estimation provided to TDC	pre project management engagement
2022-05-12T15:01:05-0500	2022-06-17T16:00:00-0500			initial completion date provided by contractor
2022-06-13T09:58:50-0500	2022-06-24T18:00:00-0500		weather 7 days	revised completion date due to encountered weather delays
2022-06-22T07:16:10-0500	2022-06-27T08:00:00-0500		weather 5 days	revised completion date due to encountered weather delays
2022-06-26T12:52:54-0500	2022-06-29T12:00:00-0500		weather 2 days	revised completion date due to encountered weather delays
2022-06-28T14:06:27-0500	2022-06-30T12:00:00-0500		weather 2 days	revised completion date due to encountered weather delays
2022-06-30T14:26:17-0500	2022-06-30T12:00:00-0500	2022-06-30T14:00:00-0500		