Evaluation of whether to use ACSS vs. TS Conductor for the ampacity increase of a transmission line resulted in a favorable decision to use TS Conductor

Design Case Study

- **Project Name:**
  - Heritage – Eldora 230kV
- **Project Scope:**
  - Rebuild / reconductor approximately 5 miles of the existing Heritage-Eldora 230kV line from 954 ACSR/AW (1495 Amps) to 3000 Amps
- **In-Service Date:**
  - Q2 2024
- **Findings:**
  - ~$2.5 MM cost savings in structure savings alone (shorter and smaller poles)

	1926 ACSS	TS Williamson
# of Structures	39	39
Typically Structure Size	140', 45 kip (2-piece)	120', 32 kip (single piece)
Total Structure Cost	$3,961,659	$945,984
Total Conductor Cost (85,000')	$467,500	$963,050
Total Ampacity of Conductor (amps)	3,000	3,198
Total Cost for Structures & Wires	$4,429,159	$1,909,034
Savings		**$2,520,125**

The use of TS's composite core conductor results in cost savings of $2.5MM compared to traditional ACSS conductor