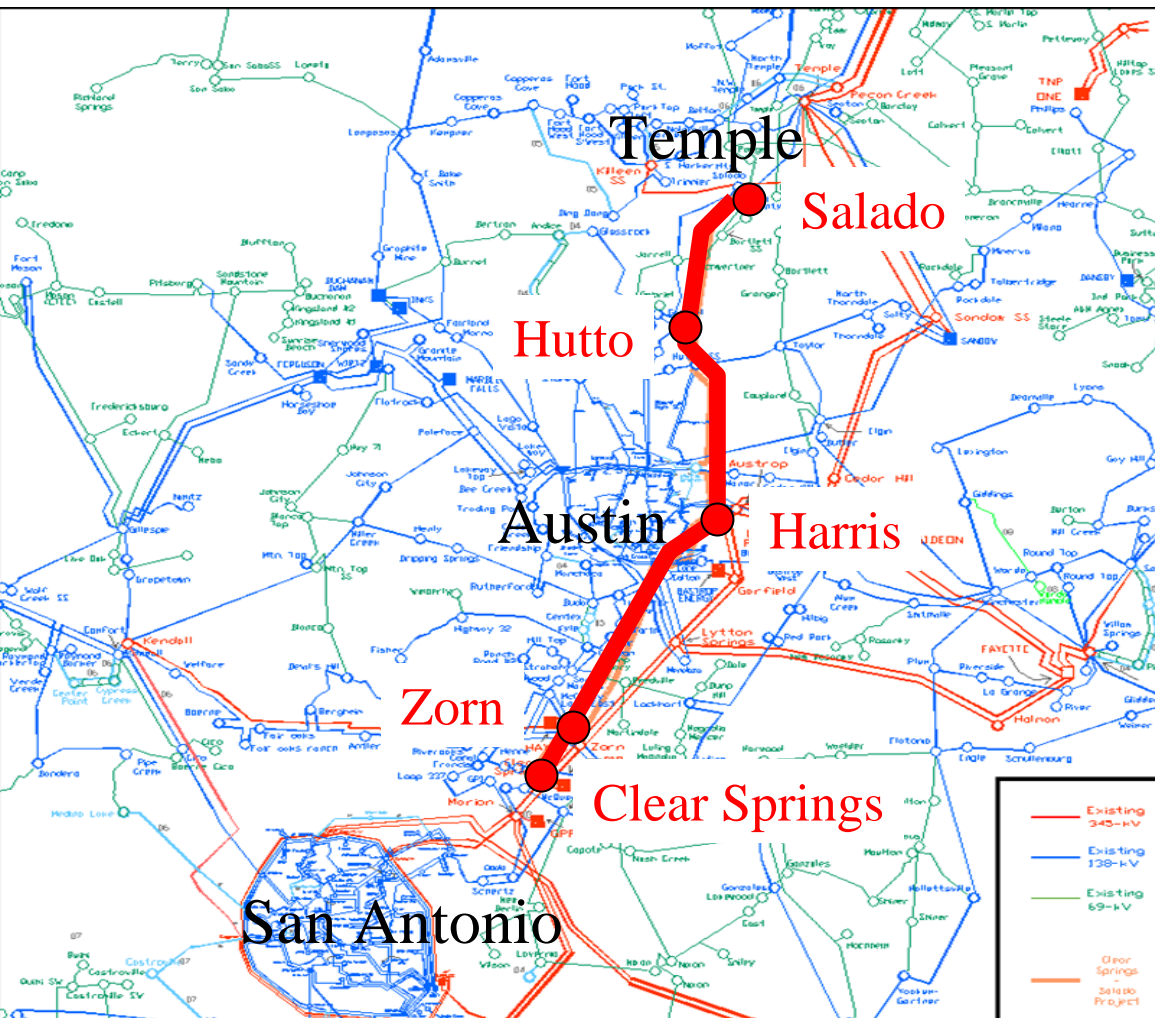


South and North Region Transmission Project:

Clear Springs – Salado 345-kV Project

December 2, 2004

Project Description



Line Segment Lengths

Project Segment	Line	Responsible
Zorn to Hutto	65 miles	LCRA
Hutto to Salado ckt #1	32 miles	TXU ED
Clear Springs to Harris Branch	57 miles	LCRA
Harris Branch to Hutto	13 miles	LCRA
Hutto to Salado ckt #2	32 miles	TXU ED

Switching Stations

Station	Responsible TO
Hutto Switching Station	TXU ED
Salado Switching Station	TXU ED
Harris Branch Switching Station	Austin Energy
345 kV Terminal at Clear Springs	LCRA
345 kV Terminal at Zorn	LCRA

Capital Costs

\$2004 Capital Costs	
AE	\$8,300,000
LCRA	\$90,473,000
TXU ED	\$42,159,000
Total	\$140,932,000

1. Mitigates \$47.5 million dollars of reliability-driven transmission projects.
2. Results in \$49 million of production cost savings annually, or \$368 million over ten years.

Capital Cost of CSS Project	-\$140 million
Capital Cost of Mitigated Projects	+\$47 million
10-yr Production Cost Benefit	<u>+\$368 million</u>
Net Benefit \$274 million	

3. Significantly reduces Central Texas generation congestion
4. Provides two new 345/138-kV injection points, with potential for more
5. Reduces the cost of taking regular transmission maintenance outages

ERCOT also examined the sensitivity of these savings to several factors, including the Houston Import Constraint Project, gas prices, new generation, and mothballed generation. In all cases the project was still justified.



Mitigated Projects

Mitigated Projects

TO	Project Element	Project	thousands
TXUED	Elgin Switch - Taylor	1x795 ACSR	\$4,606
LCRA	McCarty Lane - Redwood	2x1590 ACSR	\$3,049
LCRA	Redwood - San Marcos	2x1590 ACSR	\$3,412
LCRA	Canyon - Rohr	2x795 ACSR	\$2,049
LCRA	Rohr - Goforth	2x795 ACSR	\$2,483
LCRA	McNeil - Howard Lane	2x795 ACSR	\$2,102
LCRA	Gideon - Butler	2x795 ACSR	\$11,113
LCRA	Goforth - Turnersville	2x795 ACSR	\$3,460
LCRA	Butler – Elgin	2x795 ACSR	\$2,478
LCRA	Whitestone / Blockhouse	31.2 MVAR capacitor	\$660
LCRA	Bastrop West	31.2 MVAR capacitor	\$660
LCRA	Flatonia / Hallettsville / Frelsburg	31.2 MVAR capacitor	\$660
LCRA	Kempner	31.2 MVAR capacitor	\$660
AEN	Kingsbery - Wheless Lane- Cameron	2x795 ACSR	\$3,336
AEN	Decker - Sprinkle - Dessau	2x1590 ACSR	\$6,760
Total			\$47,488

Three Stakeholder review periods were held for this project dating back to April of 2002.

Most recent comment period included supporting comments from

- Golden Spread Cooperative
- Milam Power Company
- Alcoa
- Austin Energy
- Brazos Electric Cooperative
- Texas Independent Energy
- TXU Energy

All Stakeholder comments received supported the construction of the project



ERCOT Support for Project

ERCOT staff supports the need for the Clear Springs to Salado 345-kV double-circuit line with associated switching stations and autotransformers.