



# **8836 – High Voltage Circuit Breakers**

File ID PUB25-231

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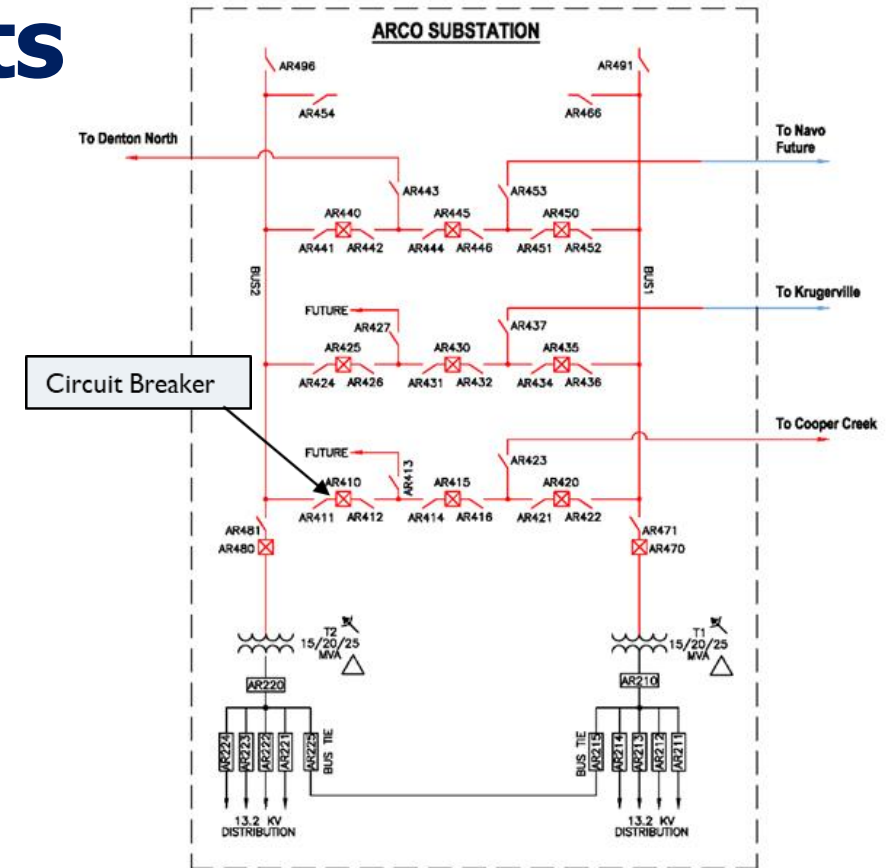
**Denton Municipal Electric**

**12-15-2025**



# Essential Functions & Benefits

- **Primary Function:** Circuit breakers interrupt the flow of current when a fault is detected, preventing damage to equipment, structures, and personnel.
- **Reset Capability:** Unlike fuses, which need replacement after a single use, circuit breakers can be reset manually or automatically to resume normal operation once the fault is cleared.
- **Strategic Placement:** Located within electric substations, circuit breakers are arranged to isolate circuits as needed. This helps limit damage from overloads or short circuits and facilitates routine maintenance.



# Purchase Planning

- **Rising Demand:** Load demand is increasing across Texas and the U.S., leading to higher material requests.
- **Extended Lead Times:** As a result, lead times continue to lengthen.
- **Advance Planning:** Purchases must be made years in advance to meet schedules and ensure timely project completion.

Circuit Breaker	Lead Time
138kV, 40kA	105-115 weeks
138kV, 63kA	140-145 weeks
345kV, 63kA	170-185 weeks

# Request for Proposals

- RFP 8836 was advertised to purchase 138kV and 345kV circuit breakers
- The RFP requested unit costs for different voltage and amperage transformers.
- Two proposals were received.
- Evaluation was based on compliance with specification, probable performance, delivery, and price.





# Contract Estimate

Qty	Description	Unit Price	Extended Price
15	3000A, 138kV Circuit Breaker, 63kA - 2000A CTs	\$232,355	\$ 3,485,325
19	4000A, 345kV Circuit Breaker, 63kA -3000A CTs	\$661,740	\$ 12,573,060
16	4000A, 138kV Circuit Breaker, 63kA- 3000A CTs	\$261,000	\$ 4,176,000
<b>Total</b>			\$ 20,234,385
10% Contingency			\$ 2,023,439
<b>Contract Estimate Total</b>			<b>\$ 22,257,824</b>

- System expansion and planning are ongoing. The above chart represents the best estimate of future purchases. The proposed contract does not require expenditure of any minimum amount.

# Recommendation

- Staff recommends approval of an agreement with Stuart C. Irby Co. for the purchase of high voltage circuit breakers in the not-to-exceed amount of \$22,257,824.00.\*

\* The costs for purchase of the high voltage circuit breakers is recoverable through the Public Utility Commission (PUC) Transmission Cost of Service (TCOS) Program.

# Questions?