



ERCOT- RCEC Integration Study

TAC

May 24, 2018

Background

2016

- Rayburn's decision to integrate completely into ERCOT

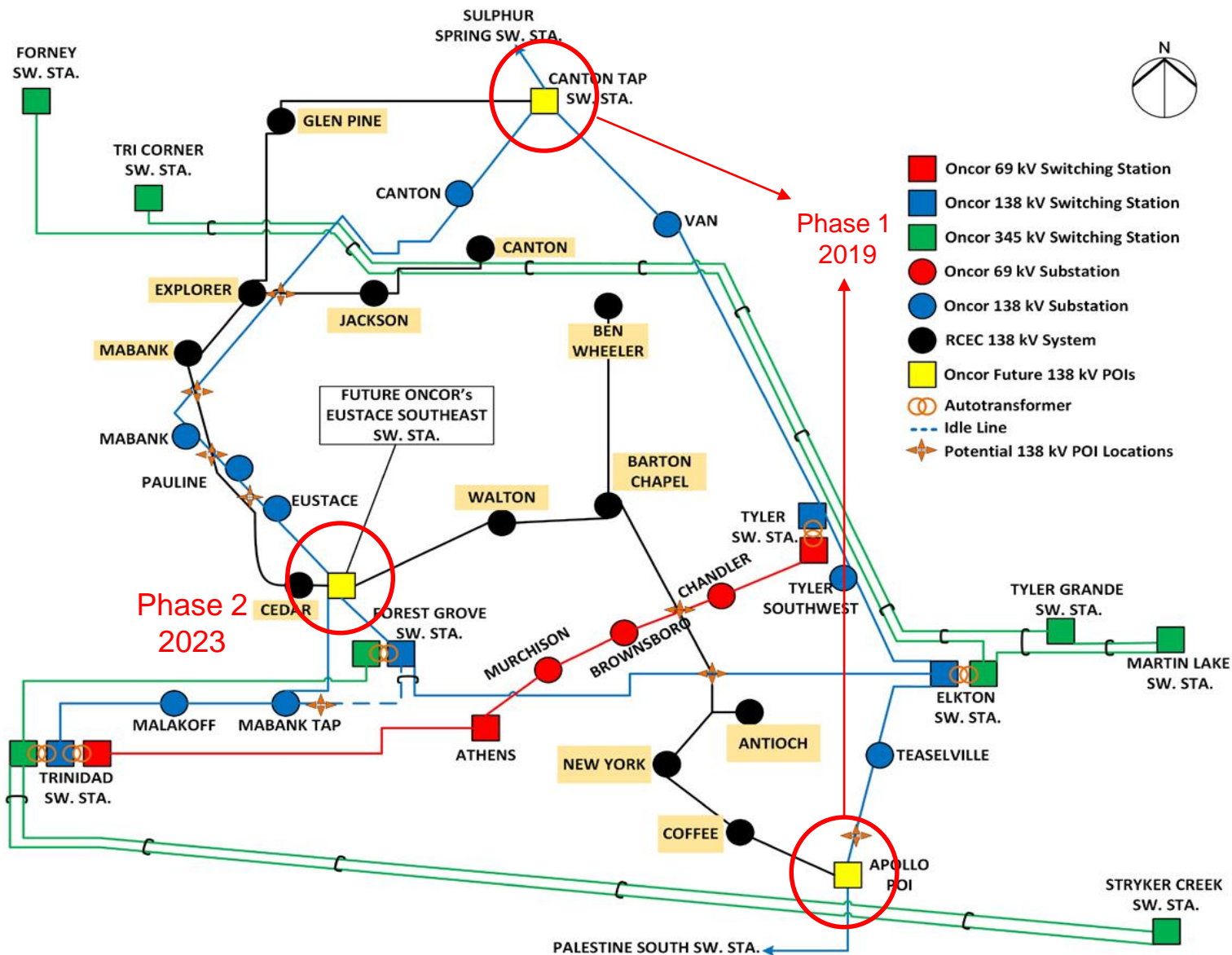
2017

- June – ERCOT report to PUC – Option 2 recommended
- PUC's directive - Coordinated study with SPP

2018

- January – ERCOT- SPP study initiated
- February – Oncor notifies ERCOT of alternative proposal
- March 1 – ERCOT study filed with PUC as to Option 2
(notes ERCOT study of Oncor's alternative proposal forthcoming)
- March 26 – Oncor submits report regarding alternative proposal
- May 1 – ERCOT study addendum filed with PUC – recommends 'Modified Alternative Option' (i.e., Oncor alternative proposal with ERCOT-recommended modifications)
- May 18 – ERCOT submits revised study addendum to PUC with revision to Option 2 – continues to recommend 'Modified Alternative Option' for integration

RCEC System – Oncor's Option (2 phases)



ERCOT Recommended Modification to Oncor's Option

- Study results with Oncor's proposal – Phase 1 + Phase 2
 - Base case violation
 - High congestion
- ERCOT's modification to Oncor Option:
 - Entire final option at same time (Phase 1 + Phase 2)
 - 4.3 miles line upgrade (495 MVA) – Forest Grove - Eustace
 - 1.3 mile line upgrade (249 MVA) – Palestine South – Palestine
 - Meets the reliability criteria (no violations)

Economic Analysis Results for Modified Alternative Option

Study Year	Annual Production Cost Increase (\$M)
2020	14
2025	17

SPP observed similar productions costs decrease in their system

Economic Analysis Results for Modified Alternative Option

Annual Load Weighted Average LMP for Modified Alternative Option – System Wide

	Annual Load Weighted Average LMP (\$/MWh)
2020 Base	30.05
2020 with Rayburn Integration	30.04
2025 Base	31.55
2025 with Rayburn Integration	31.56

Conclusion

- **Modified Alternative Option**

- All three POIs and identified upgrades should be in service for reliable integration of Rayburn load (end of 2019)
- Reliability is comparable to Option 2
- ERCOT generic cost estimate for Modified Alternative Option is \$31.7 M compared to \$41.7 M for Option 2
- ERCOT filed a report May 1st with PUCT recommending Modified Alternative Option

Questions?

For further inquiries please email Prabhu Gnanam (ggnanam@ercot.com)