



**CNP Freeport Masterplan Project -
ERCOT Independent Review Scope**

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Overview

CenterPoint submitted Freeport Masterplan Project for Regional Planning Group review. This is a Tier 1 project that is estimated to cost \$ 246.7 million.

- Proposed for 2019 – 2021 timeframe
- To serve new committed loads
- Reliability Issues
 - Severe low voltages
 - Overloads
 - Difficulty of maintenance outage Scheduling
- Provide Operational Flexibility

Study Assumptions

Steady-State Study Case

- Constructed from latest 17RTP reliability cases 2019 and 2022 summer peak EC base cases
- Study Region will consist of Coast Weather Zone
- Generator additions that meet Planning Guide Section 6.9 criteria in study region at time of study will be added to the case
- Transmission Projects expected to be in-service within the study region by 2019 and 2022 at the time of the study will be added to the case
- Project new load addition and changes will be evaluated internally and with TSP before final case changes

Contingencies and Criteria

□ Initial Steady-State Reliability Analysis

○ Contingencies for Study Region

▪ NERC TPL-001-4 and ERCOT Planning Criteria

(http://www.ercot.com/content/wcm/current_guides/53526/04_050115.doc):

- P0
- P1-1, P1-2, P1-3, P1-4,
- P2-1, P2-2, P2-3 (All EHV only)
- P3-1, P3-2, P3-3, P3-4, G-1+P7 {G-1 worst case only}
- P4-1, P4-2, P4-3, P4-4, P4-5 (All EHV only)
- P5-1, P5-2, P5-3, P5-4, P5-5 (All EHV only)
- P6: X-1 + (P1-1, P1-2, P1-3, P1-4, P7-1) {X-1 is 345 kV Auto outages}
- P7-1

○ Criteria:

▪ Thermal

- Monitor all transmission lines and transformers in study region (excluding GSU)
- Use Rate A for Normal Conditions
- Use Rate B for Emergency Conditions

▪ Voltages

- Monitor all busses 100 kV and above
- $0.95 < 1.05$ Normal
- $0.90 < 1.05$ Emergency
- Voltage deviations exceeding 8% on non-radial load busses

Dynamic Reliability Analysis

❑ Dynamic Stability Study Case

- A selected study maybe be performed on the final ERCOT recommended option
- Constructed from latest DWG 2021SUMPEAK Flat Start case
- Criteria: NERC TPL and ERCOT Planning Guides

Economic Analysis

- Economic Analysis on the ERCOT recommended option
- Most recent RTP economic case for analysis
- Evaluated for any new congestion in the system

Sensitivity Analysis – PG Section 3.1.3 (4)

- Sensitivity studies will be performed with generators in the study region that have already signed Interconnection Agreement but not met Planning Guide section 6.9 requirements
- Load scaling impacts (if any) on constraints will be evaluated

Deliverables

□ Tentative Timeline

- October Independent Review (RPG)
- November TAC
- December Board of Directors



For any comments or questions please send an email to
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