



# Evaluation of Low System Strength Transmission Grid

John Schmall  
Lead Planning Engineer  
ERCOT Transmission Planning

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# Study Objectives

- Review WSCR threshold of 1.5 for Panhandle
- Investigate applicability of a WSCR threshold for South Texas region
- Consider industry best practices with respect to WSCR versus alternative system strength metrics
- Understand the impact of load
  - Incorporate updated modeling (Planning Guide 6.9)
  - Utilize full three-phase EMT analysis tool (PSCAD)

# PSCAD Model Collection

- Ongoing Since Summer 2016 Model Request
- Model Requested for 63 Wind Projects in Panhandle & South Texas
- No Model Submitted for ~17% of Projects
- ~50% of Submitted Models Reflect Plant Voltage Controller

# Study Progress

- Kicked-off Study with Electranix in July 2017
- Review/Testing Underway for Each Submitted Model
  - Working through identified model issues with model suppliers
  - Observed significant variation in weak grid performance among various manufacturer models (individualized SCR ramp test for each project)
- Study Completion Expected in January 2018

# QUESTIONS?