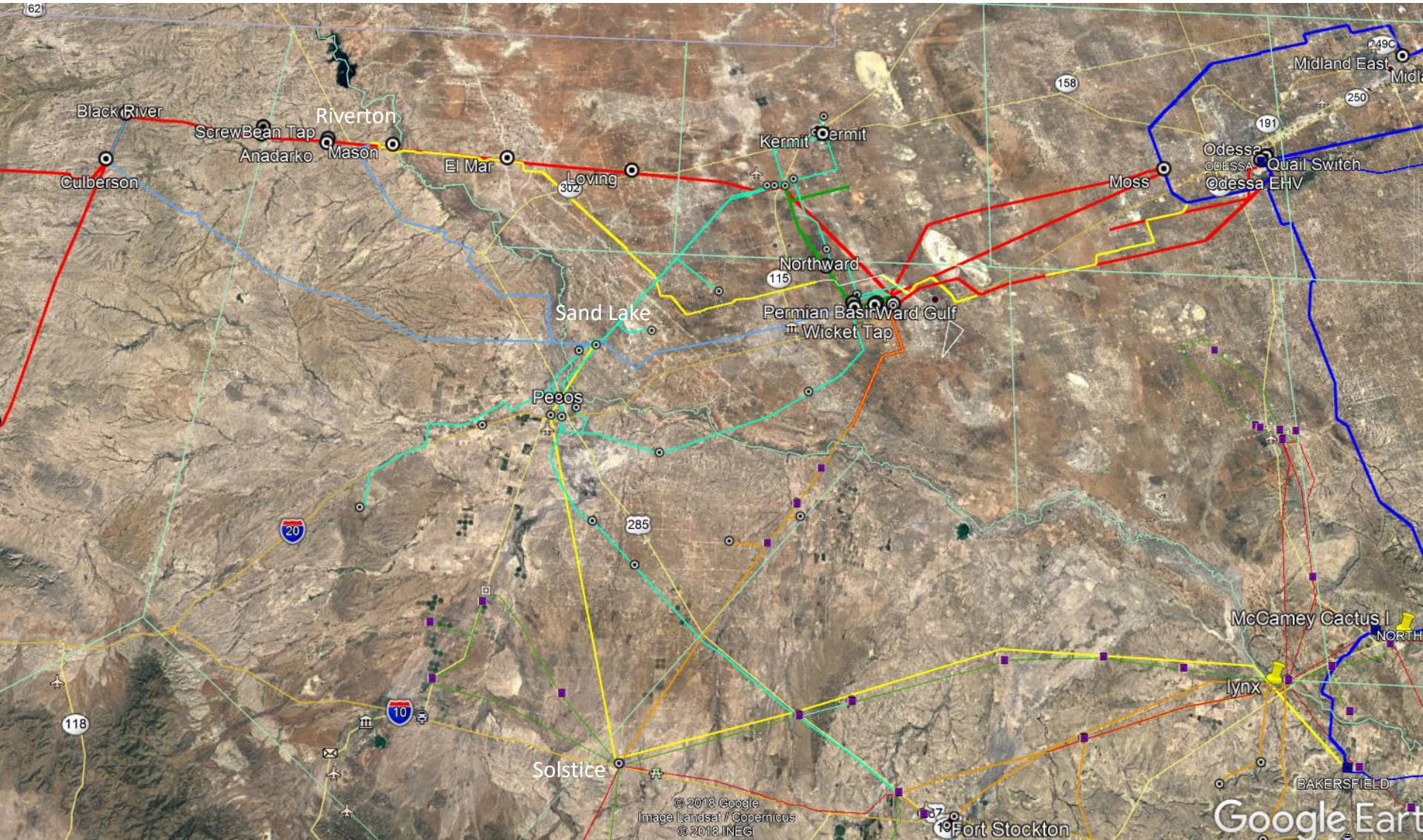


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# AEP and Oncor Far West Texas Projects

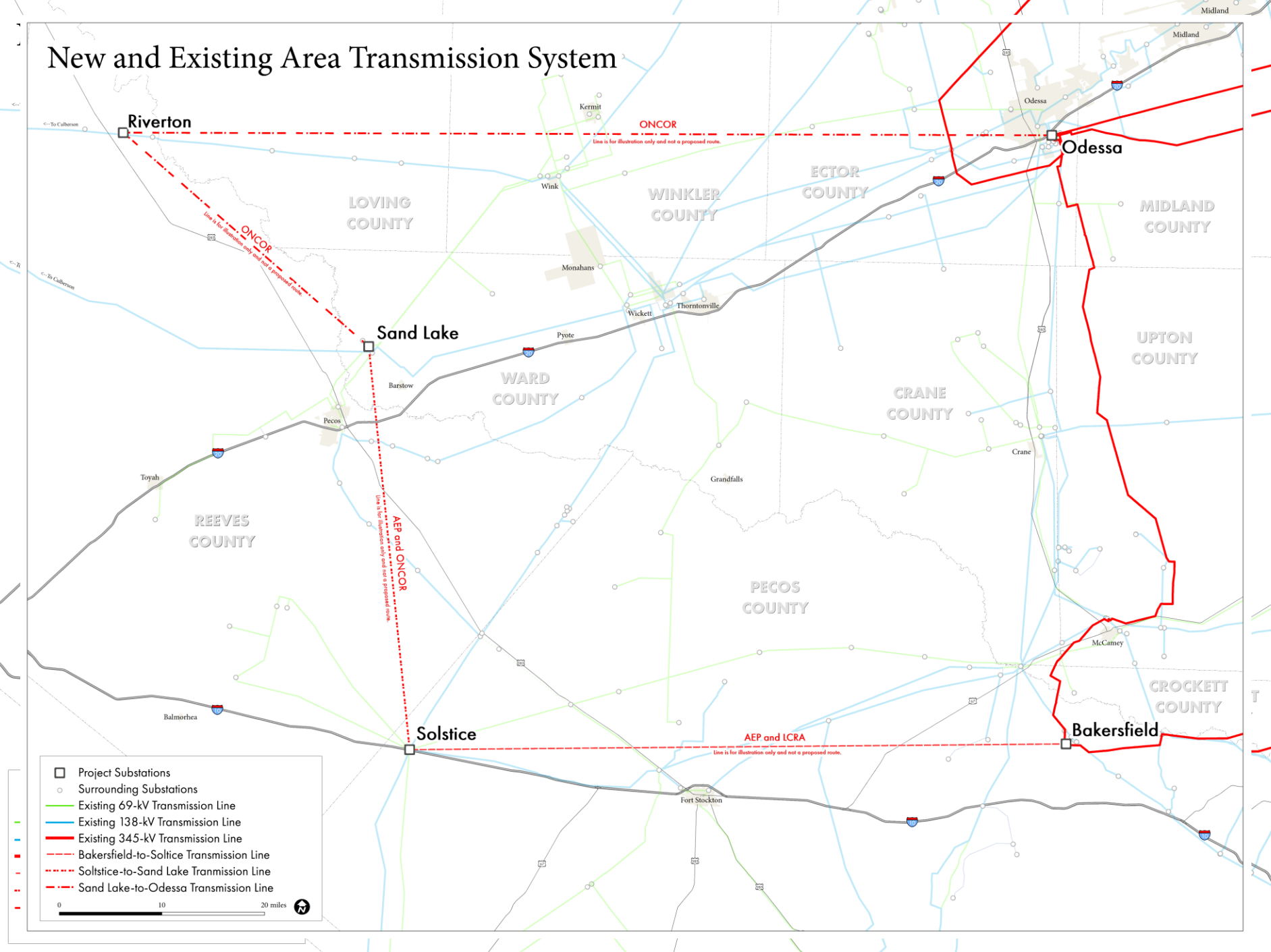
2019 Gas/Electric Partnership  
February 6-7 2019  
Houston TX

# Far West transmission system





# New and Existing Area Transmission System



# Far West Project

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- AEPSC and Oncor submitted the Far West project to ERCOT Regional Planning group April 2016
- Project proposed to build a 345 kV loop in Far West Texas connecting the Odessa – Riverton-Sand Lake- Solstice –Lynx – Bakersfield stations. Proposed cost ~\$423 million
- ERCOT performed independent review and recommended two radial 345 kV lines : Odessa – Riverton and Solstice – Bakersfield. Estimated cost ~\$336 million.
- Approved by ERCOT Board of Directors June 2017
- Due to rapid oil and gas development critical designation was requested for the Solstice – Bakersfield and Odessa – Riverton 345 kV line endorsements. ERCOT Board of Directors approved Odessa – Riverton in Feb 2018 and Solstice – Bakersfield in June 2018

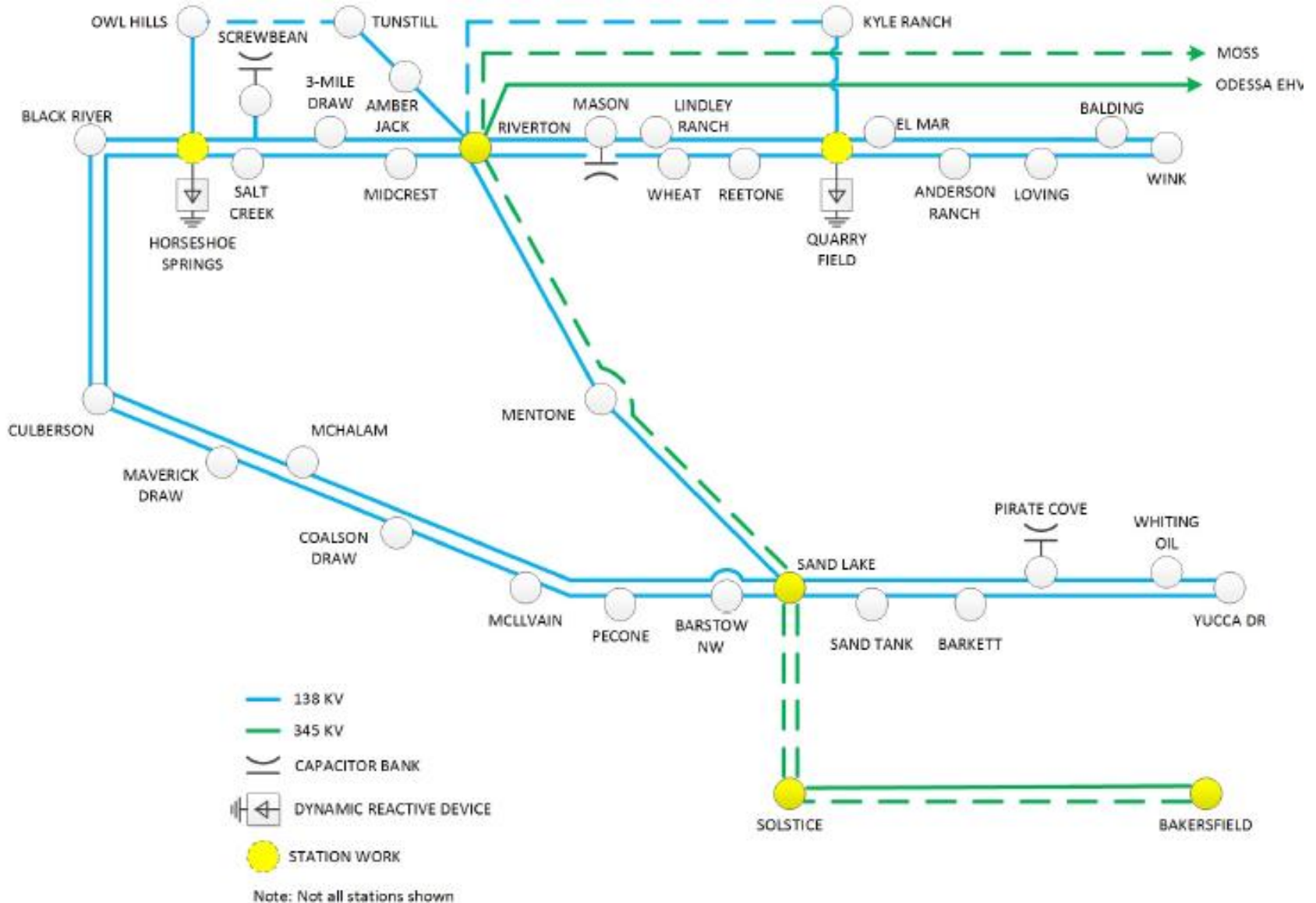


# Far West 2 Project

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- Oncor submitted the Far West 2/DRD (dynamic reactive device) project to ERCOT Regional Planning group February 2018
- Project proposed to complete the 345 kV loop in Far West Texas connecting the Sand Lake- Solstice 345 kV stations. The project also adds second circuits to Solstice to Bakersfield, Riverton - Sand Lake and Odessa/Moss – Riverton 345 kV lines, constructs new Kyle Ranch – Riverton and Owl Hills – Riverton 138 kV lines and adds two STATCOMs and capacitor banks one each at Horseshoe Springs and Quarry Fields . Proposed cost ~\$327.5 million
- ERCOT performed independent review and recommended the above solution.
- Approved by ERCOT Board of Directors June 2018 with critical designation.

# Far West 2 endorsement



# 2018 Completed Improvements

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- Rebuild of Solstice to Yucca Drive 138 kV line (AEP and Oncor)
- Rebuild and conversion of Line H to 138 kV (TNMP)
- Add second circuit to Wink to Screwbean 138 kV (Oncor)
- New double circuit Barstow to Culberson 138 kV line (Oncor)
- Rebuild Alpine to Barrilla Junction 69 kV (AEP)
- Upgrade Holt- Andrews North – Andrews South 138 kV line (Oncor)



# 2019 Planned Projects

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- Add 138 kV STATCOM at Lotebush (AEP)
- Add 138 kV STATCOM at IH20 (TNMP)
- Rebuild Wink to No Trees SW Station 138 kV (Oncor)
- Add second circuit Wink to Yukon 138 kV (Oncor)
- Build New Horseshoe Springs to Owl Hills 138 kV line (Oncor)
- Build new Owl Hills to Tunstill 138 kV line (Oncor)
- Rebuild Ft. Stockton SW to Rio Pecos 69 kV line (AEP)
- Raise structures Ft. Stockton Plant to Solstice 138 kV line (AEP)

# 2020 Planned Projects

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- Rebuild and convert Saragosa to Solstice 138 kV line (AEP)
- Convert Ft. Stockton SW to Rio Pecos 138 kV line (AEP)
- Rebuild and convert Barrilla Junction to Ft. Stockton SW to 138 kV (AEP)
- Build Riverton SW to Kyle Ranch 138 kV (Oncor)
- Build double circuit Riverton to Odessa 345 kV line (Oncor)
- Build double circuit Riverton to Sand Lake 345 kV line (Oncor)
- Build double circuit Sand Lake to Solstice 345 kV line (Oncor and AEP)
- Build double circuit Solstice to Bakersfield 345 kV line (AEP and LCRA)

# Questions

