ONCOR FAR WEST TX STUDY UPDATE

RPG Meeting - Webex
December 15, 2020

Assets Planning
Business and Operations Support
Oncor Electric Delivery Co LLC

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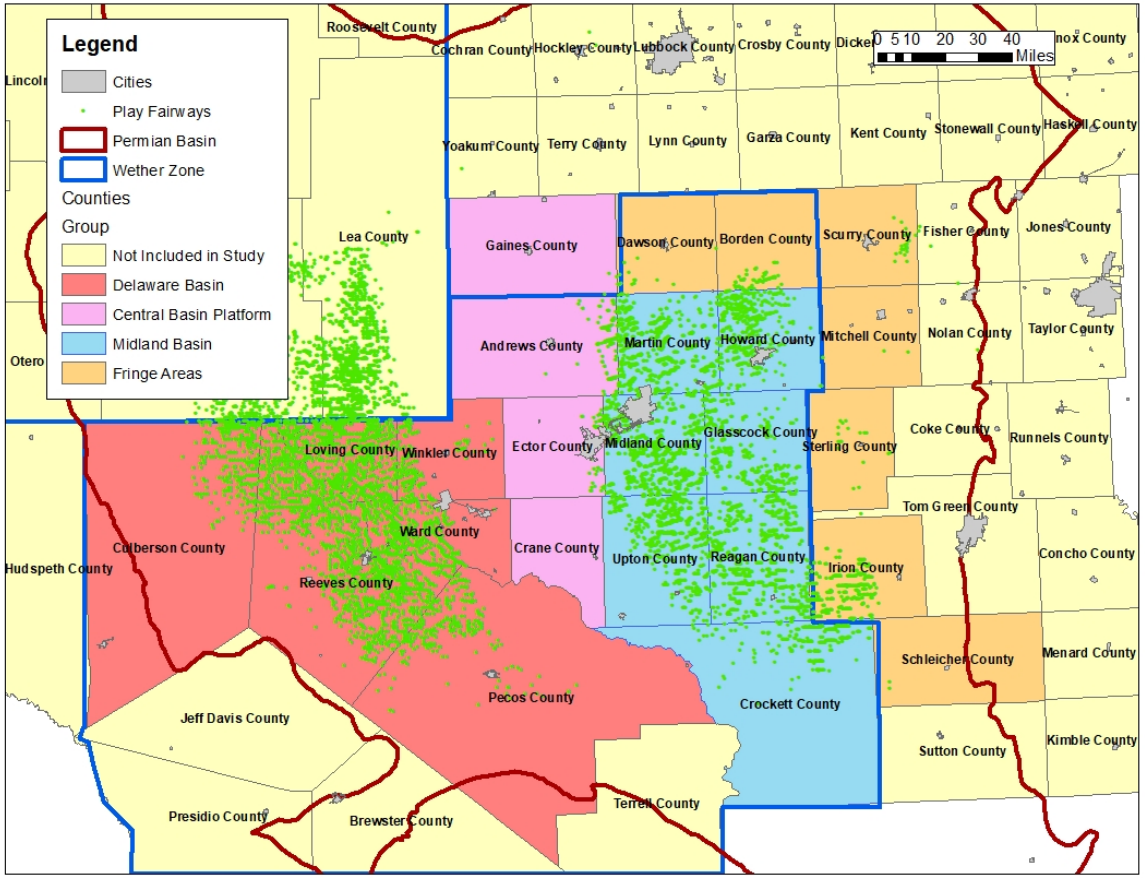
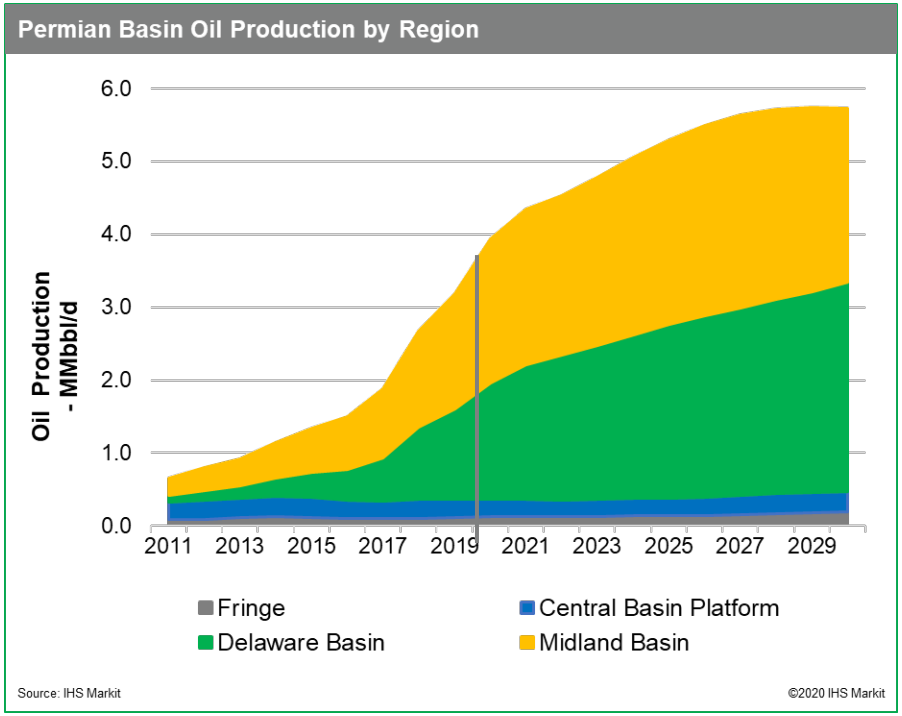
IHS Markit Study Scope

- Provide a comprehensive 10 year forecast
- Area covers the Far West Weather Zone, plus six adjacent productive counties
- Electric load forecast based on:
  - Geology and resource assessment
  - Industry intelligence
  - Oil and gas expertise
  - Commercial considerations
  - Translations of historical and forecasted oil and gas activities into electric load demands

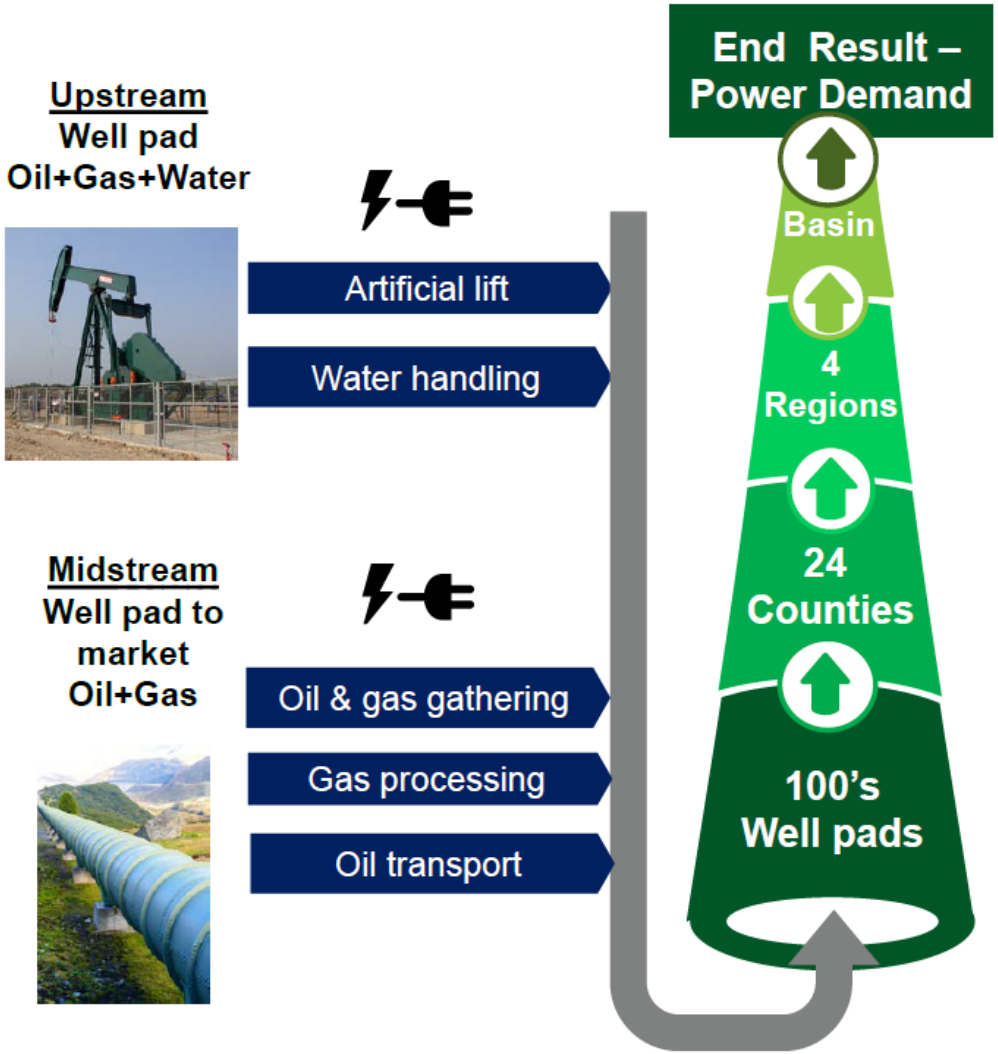


Permian Basin: oil production history and forecast to 2030 – includes massive new cost-effective resource

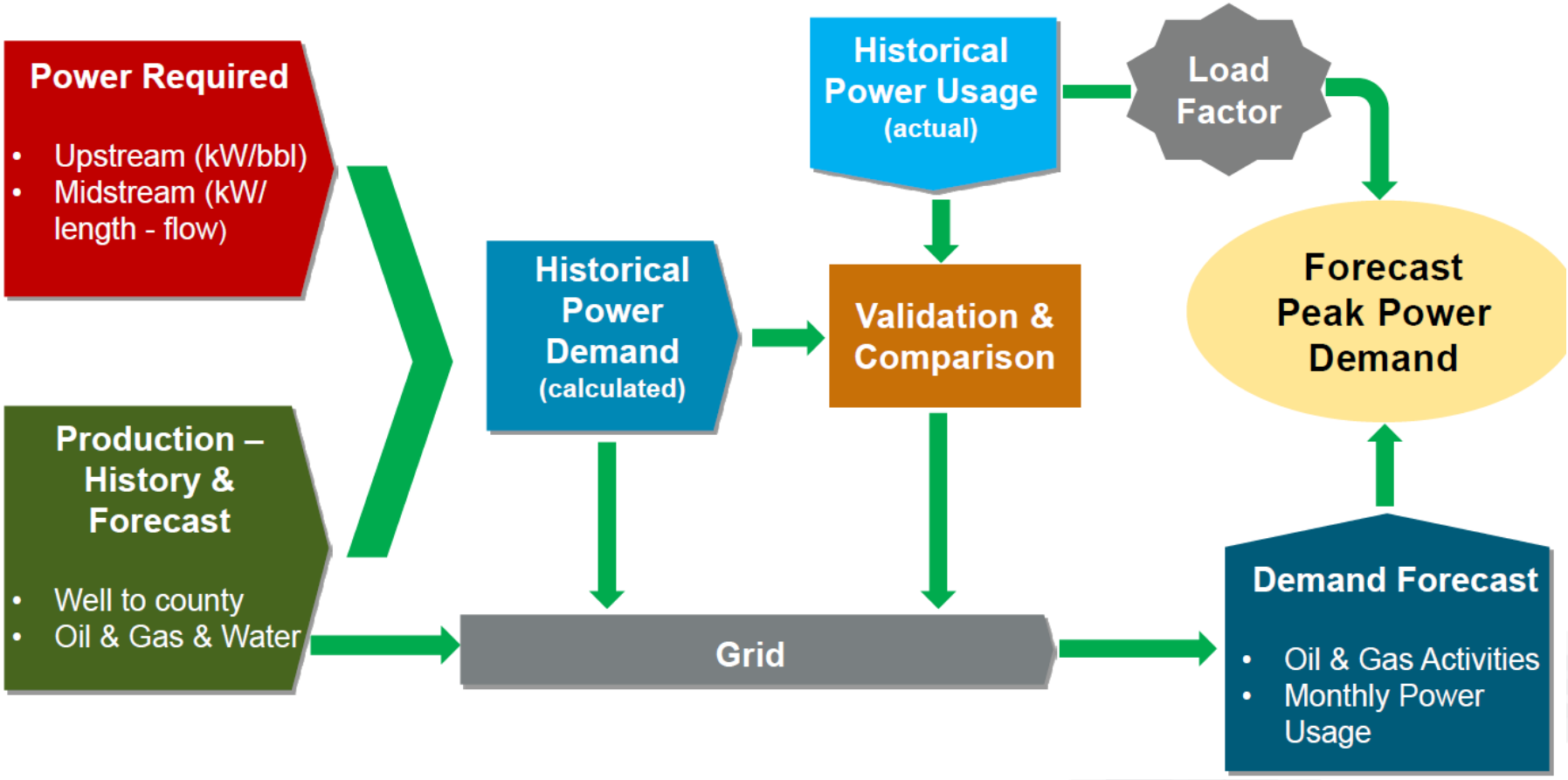
- Texas portion of Permian Basin oil production expected to grow over 50% by 2030 from 3.8 MMbbls/day (end of 2019) to 5.8 MMbbls/day
- Technology advances in the last decade have unlocked approximately 78 billion barrels of previously non-commercial unconventional resource potential
- Expansive drilling opportunities at low breakeven prices in the Midland and Delaware Basins drives production growth and future power demand



IHS Markit - industry driven bottom-up approach

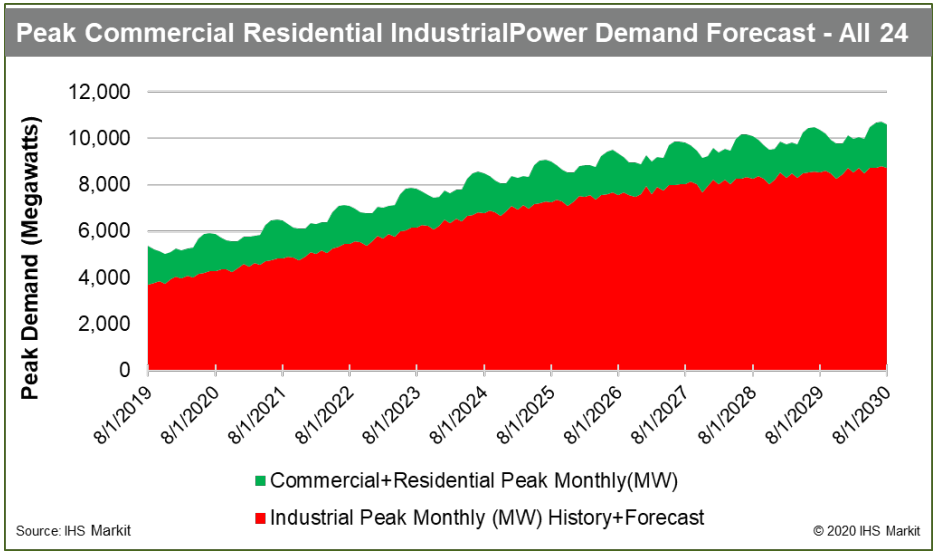


Building an industrial power forecast at the County Level



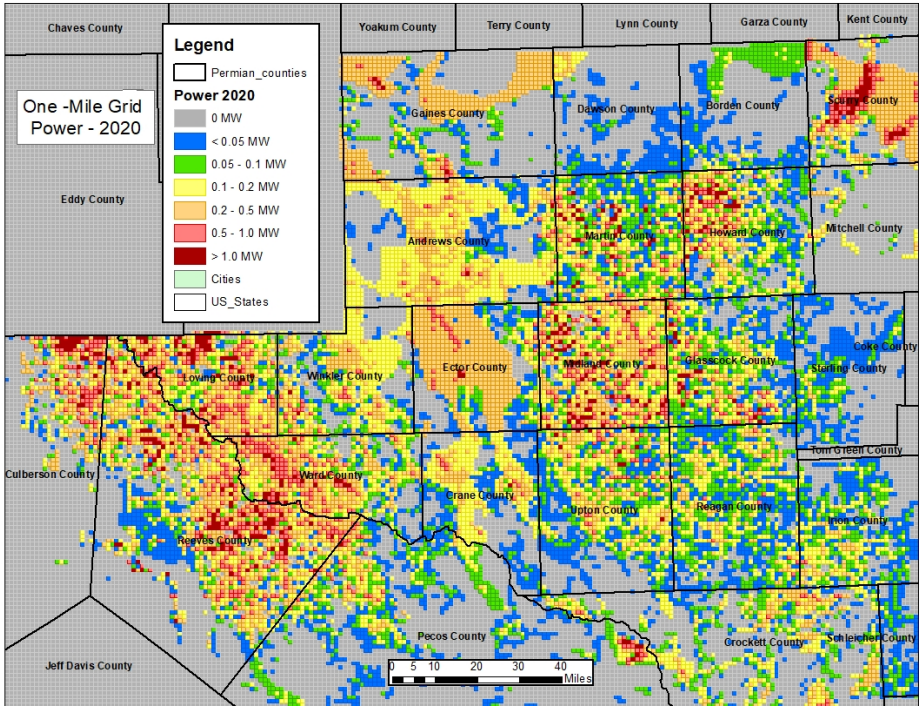
Combined I-R-C peak load demand forecast – to nearly double by 2030

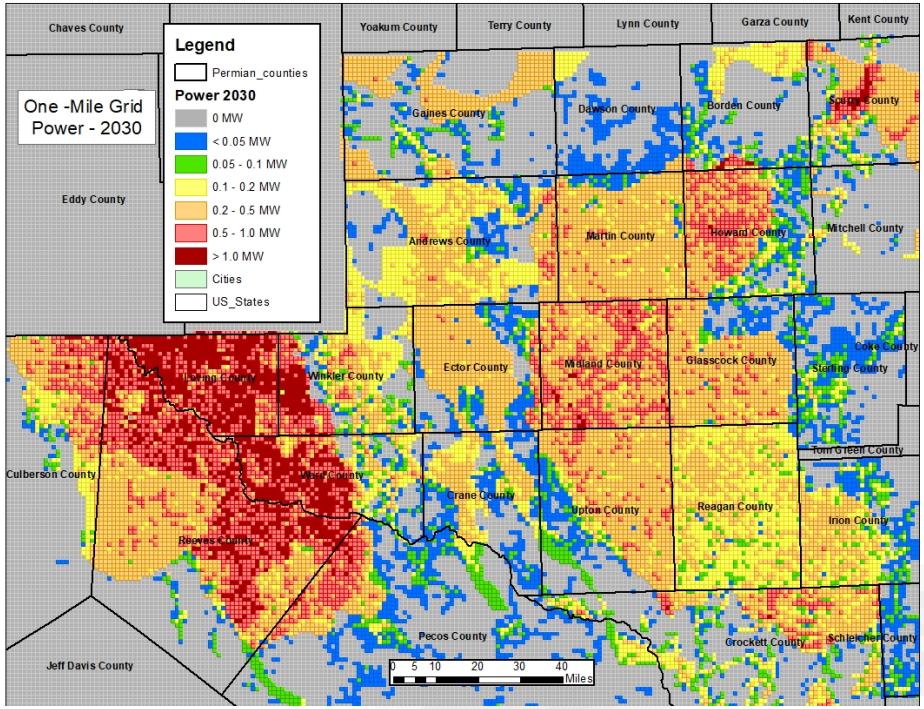
- The Delaware and Midland basins are experiencing rising power demand, driven by the steadily rising industrial loads due to ongoing and forecasted increases in oil and gas activity
- Overall, only 79% of oil and gas operations are currently being met by the grid, but in the burgeoning Delaware Basin only 61% is being met by the grid
- Industrial power demand currently comprises 70% of the 5,160 MW of the peak load, and is projected to account for 86% of the 10,200 MW of peak load by 2030
- Conservative demand assumptions – feedback from some oil and gas companies suggests IHS power estimates may be low



Region	Current	2030 Forecast	Increase
Delaware Basin	1,300 MW	4,900 MW	294%
Midland Basin	2,040 MW	3,200 MW	56%
Central Basin	1,250 MW	1,370 MW	10%
Fringe	570 MW	710 MW	24%
Total	5,160 MW	10,200 MW	97%

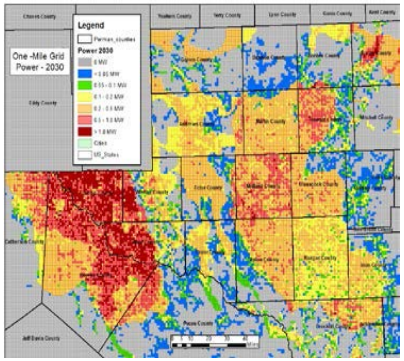
Granular projection data through 2030 - MW by square mile



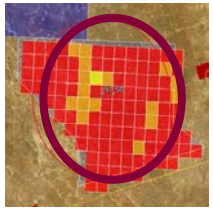


Substation and transmission plan methodology

1. IHS Markit Forecast Data



2. Substation Plan



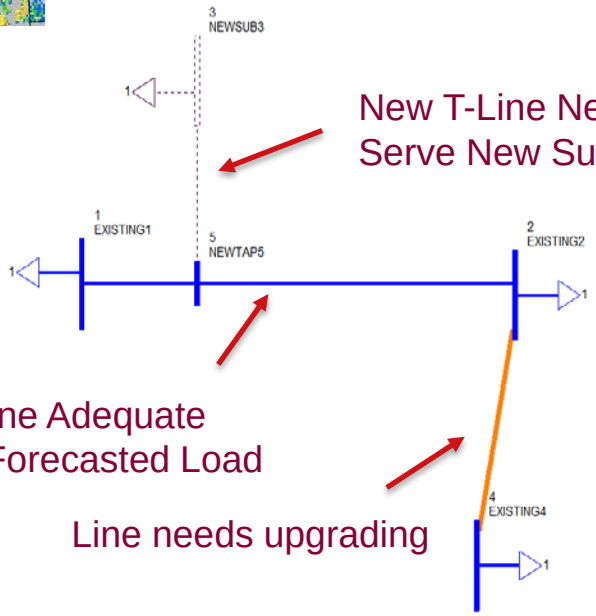
3. Substation Load Forecast Table

For Illustration Only

2025 Loading Forecast (MW)	PSSE Bus Number	PSSE Load ID	Lat	Lon
25	1	1	30.9	-101.8
8	2	1	31.1	-102.5
11	3	1	31.3	-101.2
33	4	1	31.5	-101.9

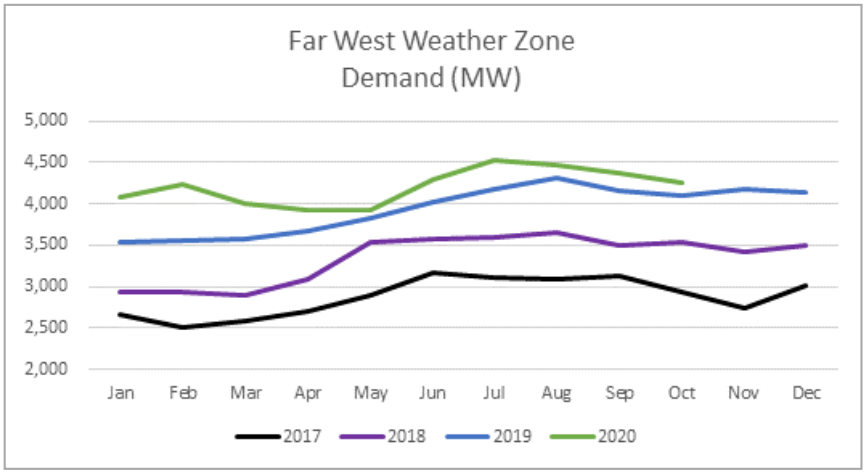
4. Use Substation Load Forecast Table To Build Powerflow Cases

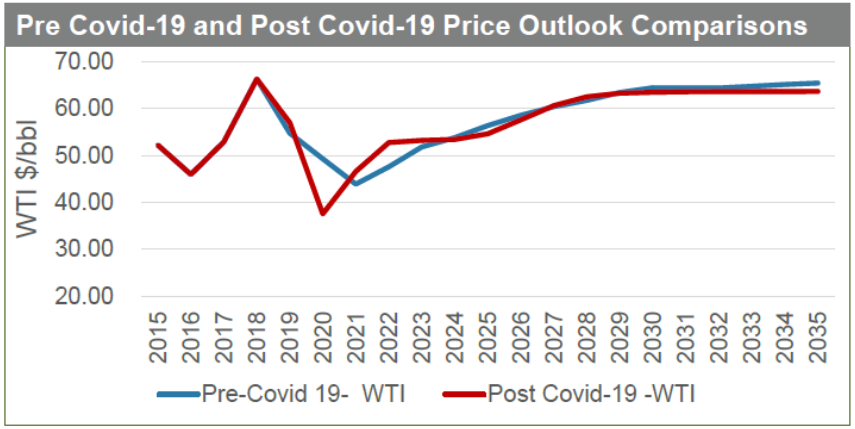
- Model Substations
- Identify New T-Lines
- Identify Upgrades



Impact of Covid-19 on power demand is limited, and US WTI long-term price outlook projects sustained growth

- Load forecast was issued in March and intended to be a long term forecast
  - Recent decreases in the Permian Basin are typical of other US basins and many other areas of the world that have been forced to reduce oil output – however, 40-45% of all O&G capital investment in the USA is projected to be in the Permian Basin
  - Much of Permian production breaks even at under $45/bbl, and with prices expected to average about ~$47bbl in 2021, production is expected to resume growth in 2021
- Far West Weather Zone demand growth continues, with monthly peak demands exceeding those from 2019
- By 2022, long-term price outlook expected to return to near pre-Covid-19 levels of the low $60/bbl range, which will incentivize Permian Basin development with production outlook to resume upward trajectory





Conclusions – West Texas load additions: Permian Basin study

- Although recent oil and gas activity has been reduced due to a black swan event (Covid-19), price recovery will drive long term increases in oil and gas activities and power demand
- Undeveloped oil resources of approximately 78 billion barrels can be produced with current technology and forecasted long-term oil prices
- Producers prefer the low-cost option of electrical grid power, and utilities have an obligation to serve load; however, portions of the Permian Basin (particularly the Delaware Basin), are still significantly underserved by the electrical grid
- Sufficient T&D capacity additions will be required to meet the forecasted doubling of demand associated with the projected long-term increases in oil and gas activity, especially in the Delaware Basin

QUESTIONS