A ROADMAP FOR GAS RELIABILITY IN TEXAS

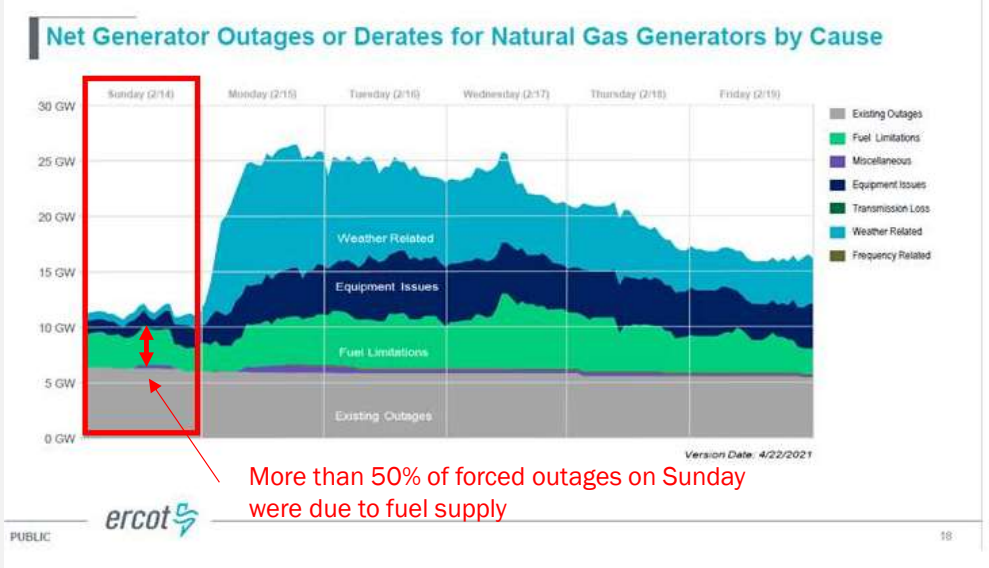
MAY 2021

TEXAS COMPETITIVE POWER ADVOCATES
TCPA

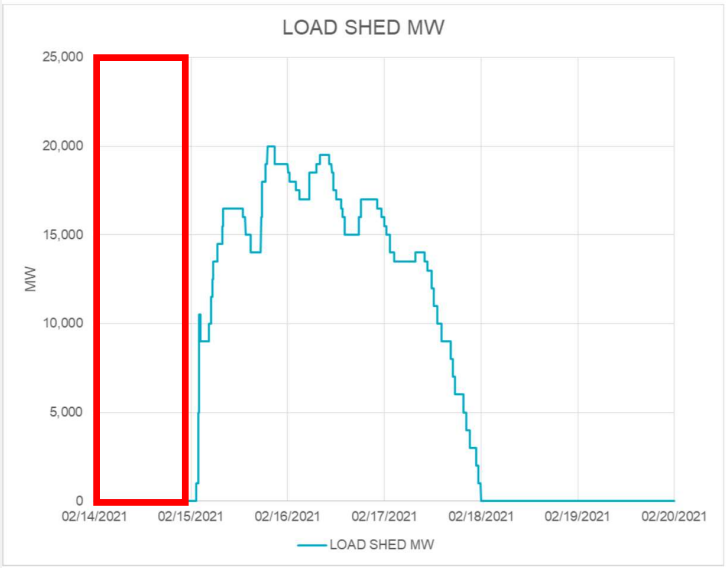
GAS SUPPLIES WERE ALREADY INSUFFICIENT BEFORE THE POWER OUTAGES STARTED

The system ran out of fuel on Sunday (5GW of fuel derates on power plants): the load shed didn't start until Monday.

ERCOT SHOWS INSUFFICIENT FUEL ON 2/14:



ERCOT SHOWS LOAD SHED INSTRUCTIONS STARTED A DAY LATER, ON 2/15:

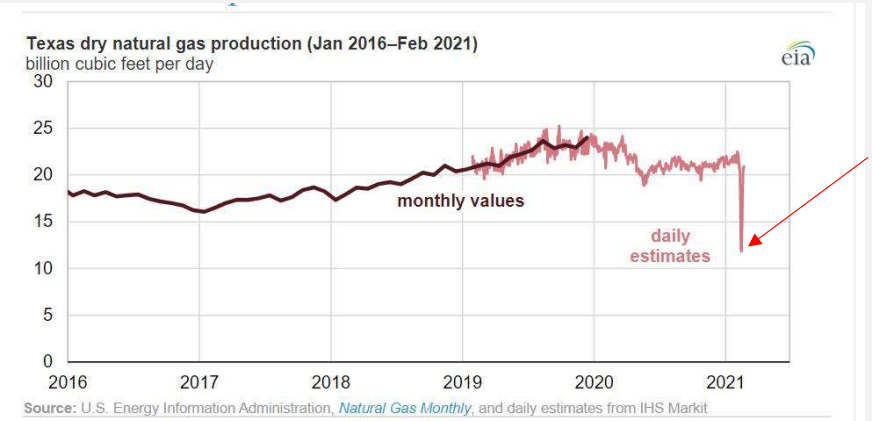


Data Sources:
Ercot.com

GAS PRODUCTION DROPPED BY HALF

Weatherization of the entire natural gas chain (from production to processing to transport to storage) is required to prevent such large drops in the future.

THE EIA SHOWS A DROP OF ALMOST 50%:



EIA shows production dropped to 12 bcf/d.

EIA: "*From February 8 to 17, natural gas production in Texas fell by more than 10 Bcf/d. The decline in natural gas production was mostly a result of freeze-offs, when water and other liquids in natural gas wells freeze at the wellhead or in natural gas gathering lines and block the flow. Texas natural gas production infrastructure is more susceptible to the effects of extremely cold weather because it is not winterized to the same extent as natural gas production infrastructure in colder, northern areas of the Lower 48 states.*"

THE RRC HAS AN IMPLIED DROP OF ALMOST 50%:

RRC: The RRC's Feb 2021 monthly production is 594 bcf (average 21bcf/d in Feb vs 27 bcf/d in Jan). Assuming 25 bcf/d during the first two weeks, this gives an implied drop during the storm of almost 50%.

Week:	bcf/d
1	25
2	25
3	12
4	23
Avg across weeks	21

OTHER SOURCE: Why does this chart show only a 20% drop? The data might be wrong. Or, due to lack of transparency into intrastate markets, the assumptions have a large error.

Data Sources:
https://www.eia.gov/todayinenergy/detail.php?id=47896
https://www.eia.gov/todayinenergy/detail.php?id=46896
https://www.rrc.state.tx.us/oil-and-gas/research-and-statistics/production-data/texas-monthly-oil-gas-production/ last updated 4/22/21

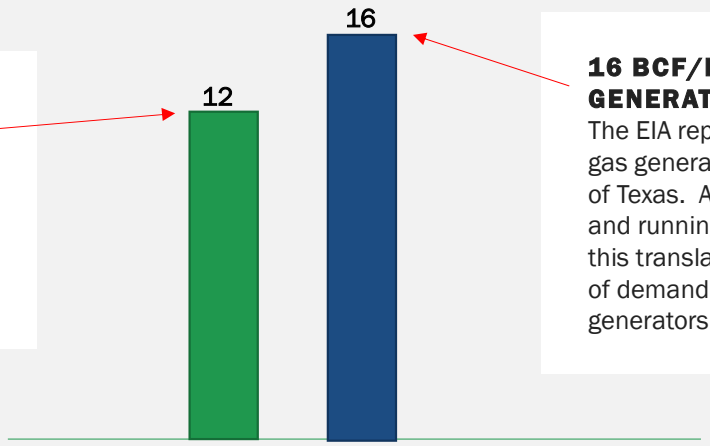
GAS PRODUCTION WOULD NOT HAVE BEEN SUFFICIENT FOR PEAK POWER DEMAND

Weatherization of the entire natural gas chain (from production to processing to transport to storage) is required to ensure sufficient supply..

SUPPLY:

12 BCF/D OF GAS PRODUCTION. The EIA shows that production dipped to 12 bcf/d during winter storm Uri.

DEMAND:



16 BCF/D OF PEAK GENERATOR DEMAND. The EIA reports 73.4GW of gas generators in the state of Texas. At a 9 heat rate and running 24 hours/d, this translates into 16 bcf/d of demand with all gas generators running at max.

This supply does not include storage withdraws and imports from other states.

This demand does not include industrial, residential and commercial heating, exports to other states, exports to Mexico, and LNG demand.

Data Sources:
EIA
https://www.eia.gov/electricity/data/eia860M/

GAS TRANSPARENCY

GAS TRANSPARENCY WOULD CREATE A FAIR PLAYING FIELD. Buyers and suppliers would no longer be disadvantaged. Pipeline marketing companies have access to information on pipelines that is not available to anyone else in the competitive market.

GAS TRANSPARENCY WOULD HELP FACILITATE SYSTEM PLANNING. Grid planners would be able to better estimate how much gas supply is available for generators through increased insight into pipeline flows.

GAS TRANSPARENCY IS ALREADY BEING DONE ON INTERSTATE PIPELINES. The largest intrastate pipeline companies are also interstate pipeline owners. In other words, these pipeline companies are already required to do the steps listed below.

STEPS TO ENSURING A FAIR GAS MARKET:

THE FOLLOWING ARE NECESSARY:

+ Require that intrastate pipelines and storage facilities post daily the capacities of, and volumes flowing through receipt and delivery points (consistent with interstate practices) and mainline segments on Electronic Bulletin Boards in order to make available the information needed to track daily flows of natural gas throughout Texas.
+ Publishing index of shippers and corresponding customers showing transportation agreement details (MDQs, receipt and delivery points), thus allowing generators to access additional supply options.
+ Mandate the separation of transmission function from merchant function for gas pipelines and gas marketers on intrastate pipelines.

THANK YOU

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