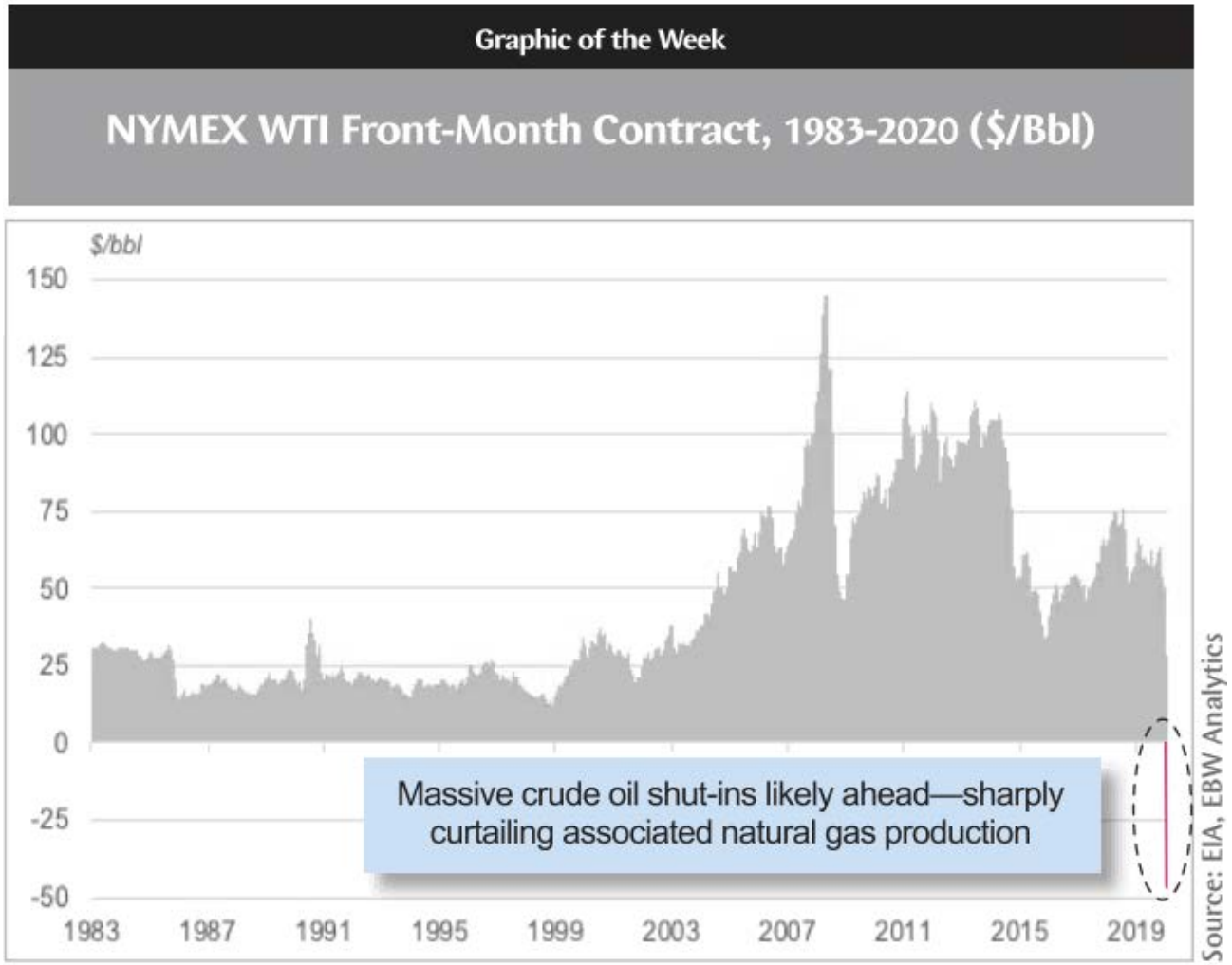
Recent highlights in energy landscape

- **Oil prices**
  - negative prices / oversupplied market
- **Natural gas prices**
  - low price environment
- **Demand destruction**
  - Reduced regional load
- **New resource delays / risks**
  - COVID-19 delaying construction of new resources, lack of financial backing putting some projects at risk
- **MIDC prices**
  - Little change since beginning of March

Negative oil prices



- The May WTI contract closed at an eye-watering -$37/bbl on Monday as speculative longs were forced to close out their positions ahead of contract expiration. With little to no storage space available, many were forced to pay handsomely to offload their physical delivery obligations.

- The physical storage constraints will force dramatic shut-ins of crude oil production—<u>simultaneously curtailing associated gas output</u>.

Ships able to carry 2m barrels chartered for $335,000 a day to store oil unwanted during the Covid-19 pandemic

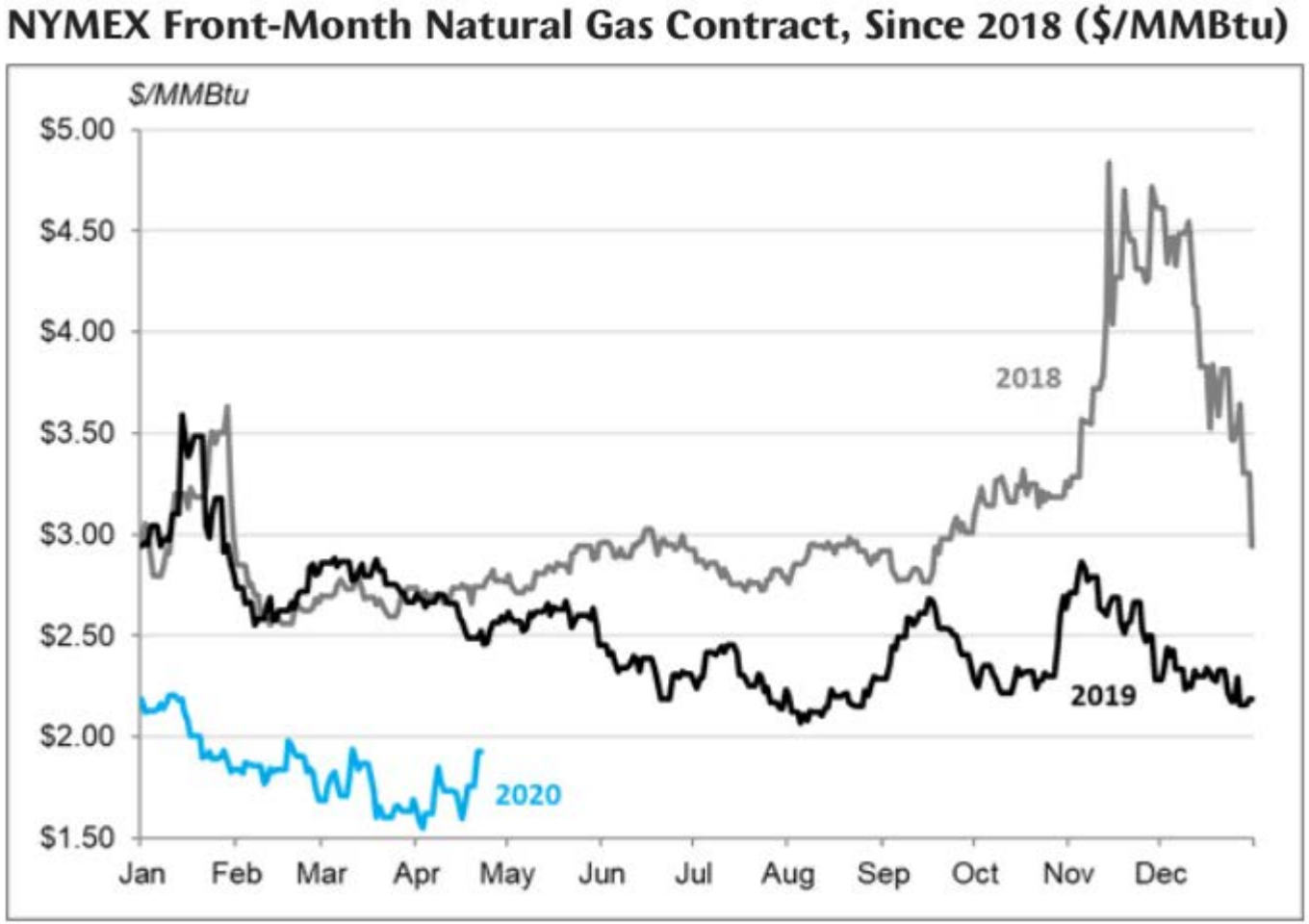
"At least one in 10 supertankers around the world is serving as a floating oil storage facility"
4/21/20 Wall Street Journal article

▲ A supertanker off Jurong Island in Singapore. The island state and the US gulf coast are harbouring scores of tankers just to store oil. Photograph: Edgar Su/Reuters

Low natural gas prices

- The natural gas market is still struggling to figure out whether the drop in demand due to Covid-19 will be smaller or larger than the decline in supply due to cutbacks in oil production. This issue is unlikely to be resolved quickly. Until it is, price volatility could remain high.

- While natural gas prices may knee-jerk higher (in response to negative oil prices), however, surging May injections and likely upward revisions to gas demand loss estimates may lead natural gas futures lower by late spring or early summer



EBW Analytics Group

Demand destruction

Mid-C UPDATE
April 17, 2020

This is a new forecast that PRT created that is not learning about Demand Destruction due to Covid-19. Temperatures errors will cause variations in these forecasts.

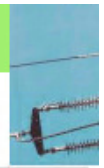
Note: The Production Model (Blue Line) is slower to learn about demand destruction during temperatures that have not been measured since Covid-19.

Load destruction is occurring in the N.W. and when compared with the BPA public load actuals with actual temperatures demand destruction is to 3-5% or 200 to 400 MW.

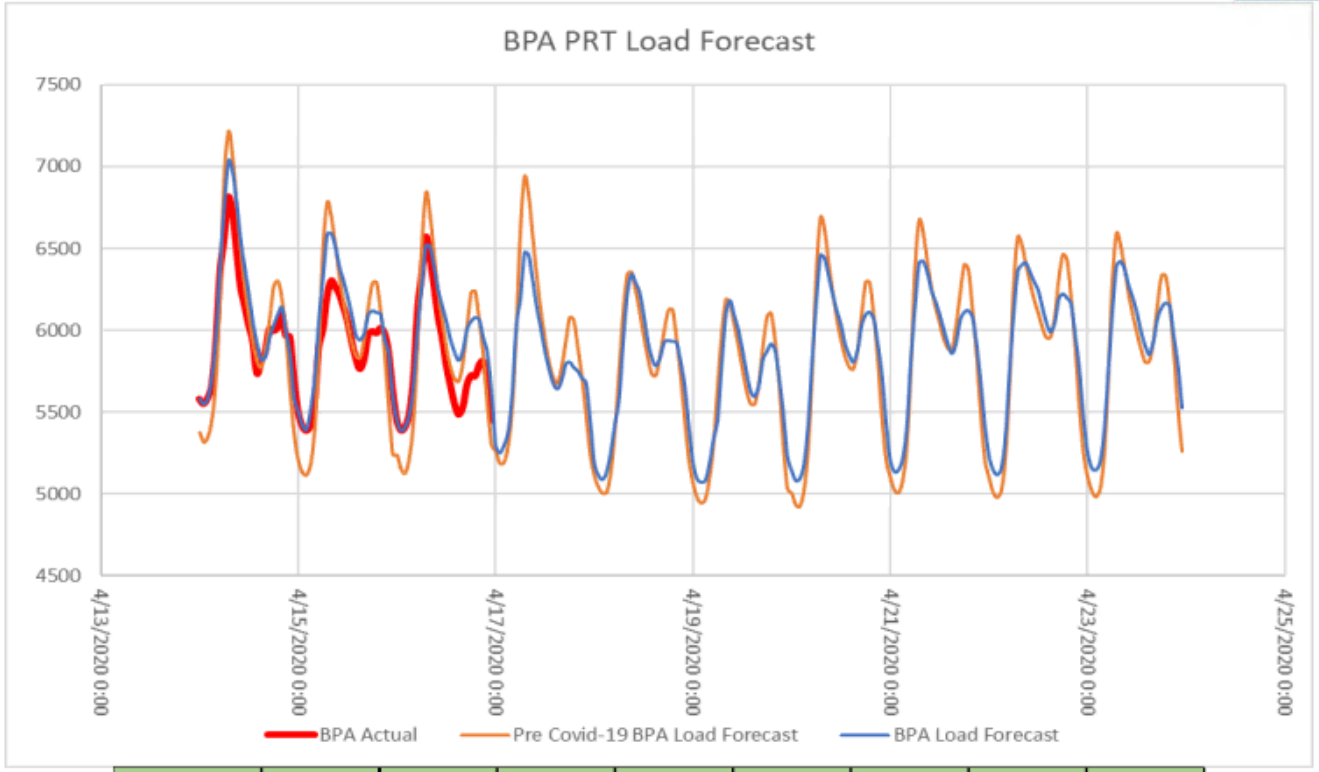
Localized areas in Washington State are much higher in the Puget Sound Area.

AFTERNOON REPORT

COVID-19



COVID-19 BPA Load Graph



Modeled Demand Destruction	6:00	7:00	8:00	9:00	16:00	17:00	18:00	19:00
4/14/2020	-408	-404	-321	-253	-26	-64	-273	-285
4/15/2020	-507	-578	-394	-250	-127	-176	-292	-310
4/16/2020	-166	-269	-267	-199	-271	-352	-505	-519

New resources delayed / at-risks

- The spread of coronavirus is putting at risk up to 25 GW of wind energy projects, $35 billion in investments and more than 35,000 jobs

- Responses from 175 industry representatives surveyed in March by the U.S. Energy Storage Association, or ESA, indicate that 62% are already experiencing project delays and 37% said they anticipate setbacks of six months or longer.

Relatively stable MIDC wholesale prices

- April MIDC prices have been supported by lower flows and cooler temperatures, potentially offsetting any impacts from reduced regional demand
- Summer and winter prices exhibiting typical price fluctuations