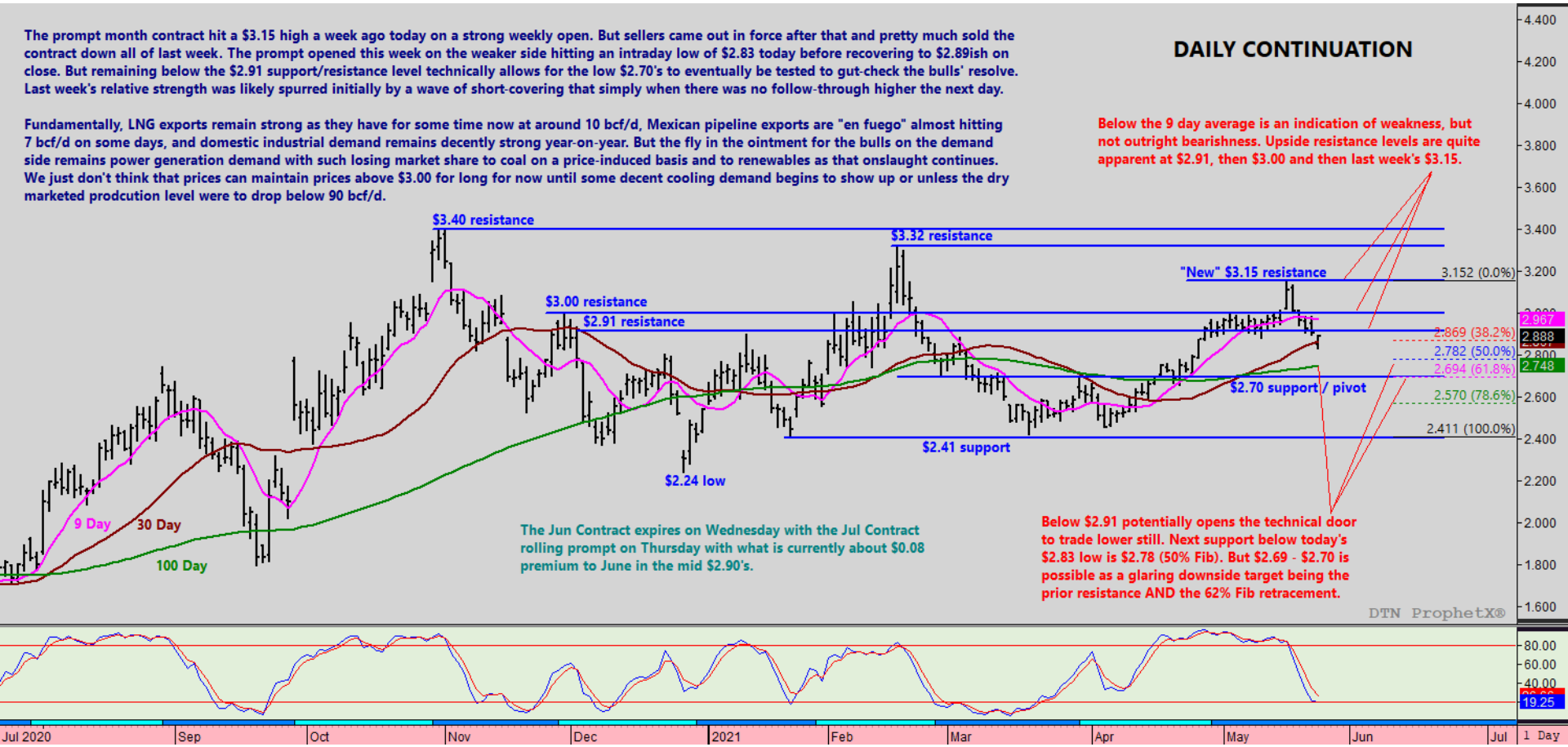
NATURAL GAS PRICE OUTLOOK

May 24, 2021

The prompt month contract hit a $3.15 high a week ago today on a strong weekly open. But sellers came out in force after that and pretty much sold the contract down all of last week. The prompt opened this week on the weaker side hitting an intraday low of $2.83 today before recovering to $2.89ish on close. But remaining below the $2.91 support/resistance level technically allows for the low $2.70's to eventually be tested to gut-check the bulls' resolve. Last week's relative strength was likely spurred initially by a wave of short-covering that simply when there was no follow-through higher the next day.

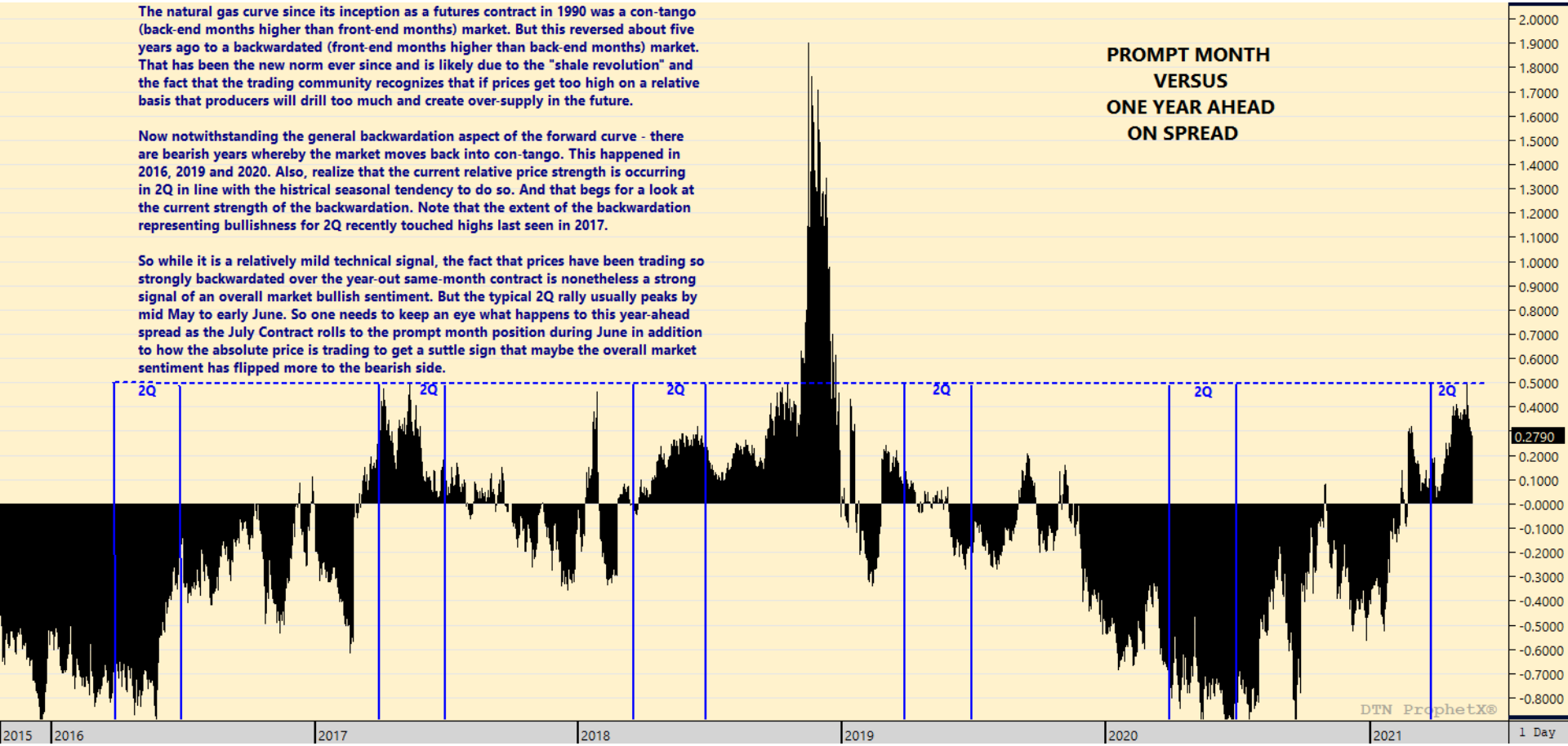
Fundamentally, LNG exports remain strong as they have for some time now at around 10 bcf/d, Mexican pipeline exports are "en fuego" almost hitting 7 bcf/d on some days, and domestic industrial demand remains decently strong year-on-year. But the fly in the ointment for the bulls on the demand side remains power generation demand with such losing market share to coal on a price-induced basis and to renewables as that onslaught continues. We just don't think that prices can maintain prices above $3.00 for long for now until some decent cooling demand begins to show up or unless the dry marketed prodcution level were to drop below 90 bcf/d.

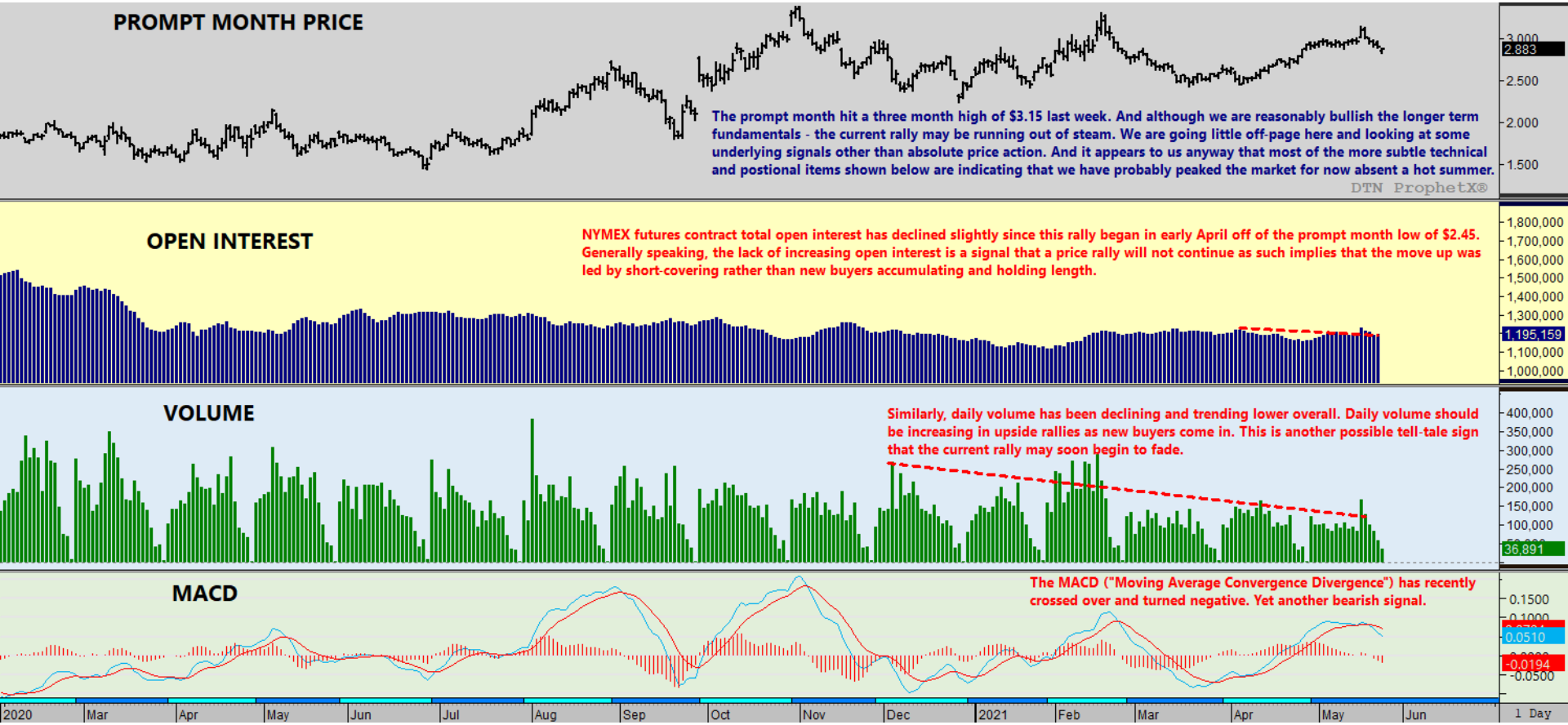


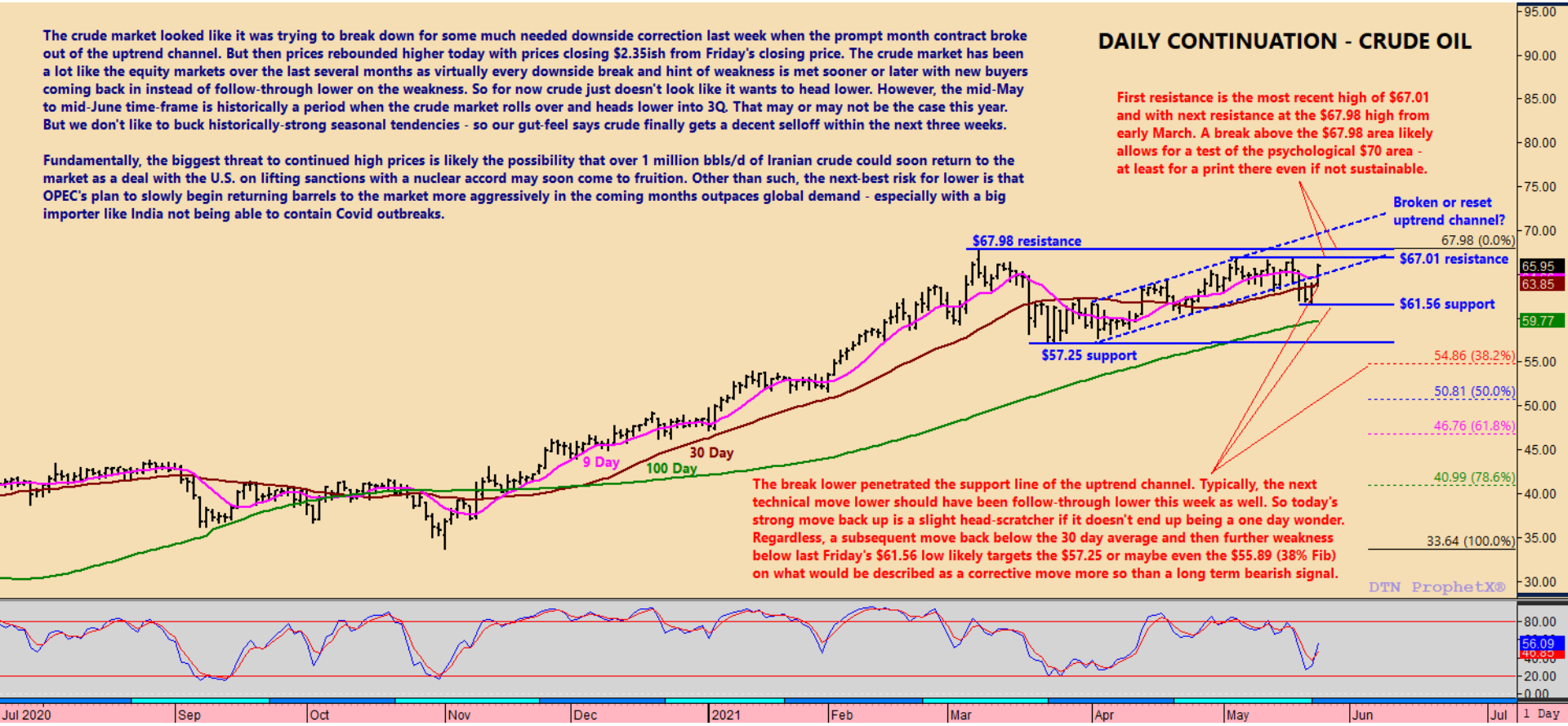
The natural gas curve since its inception as a futures contract in 1990 was a con-tango (back-end months higher than front-end months) market. But this reversed about five years ago to a backwardated (front-end months higher than back-end months) market. That has been the new norm ever since and is likely due to the "shale revolution" and the fact that the trading community recognizes that if prices get too high on a relative basis that producers will drill too much and create over-supply in the future.

Now notwithstanding the general backwardation aspect of the forward curve - there are bearish years whereby the market moves back into con-tango. This happened in 2016, 2019 and 2020. Also, realize that the current relative price strength is occurring in 2Q in line with the histrical seasonal tendency to do so. And that begs for a look at the current strength of the backwardation. Note that the extent of the backwardation representing bullishness for 2Q recently touched highs last seen in 2017.

So while it is a relatively mild technical signal, the fact that prices have been trading so strongly backwardated over the year-out same-month contract is nonetheless a strong signal of an overall market bullish sentiment. But the typical 2Q rally usually peaks by mid May to early June. So one needs to keep an eye what happens to this year-ahead spread as the July Contract rolls to the prompt month position during June in addition to how the absolute price is trading to get a suttle sign that maybe the overall market sentiment has flipped more to the bearish side.



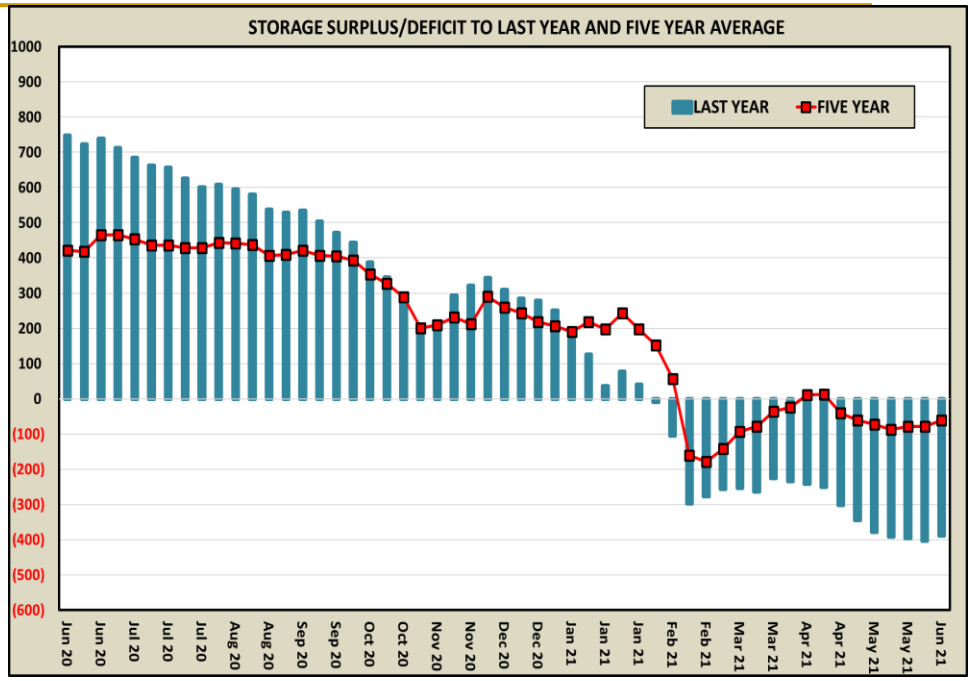

PROMPT MONTH PRICE
The prompt month hit a three month high of $3.15 last week. And although we are reasonably bullish the longer term fundamentals - the current rally may be running out of steam. We are going little off-page here and looking at some underlying signals other than absolute price action. And it appears to us anyway that most of the more subtle technical and postional items shown below are indicating that we have probably peaked the market for now absent a hot summer.
DTN ProphetX®
3.000
2.883
2.500
2.000
1.500
OPEN INTEREST
NYMEX futures contract total open interest has declined slightly since this rally began in early April off of the prompt month low of $2.45. Generally speaking, the lack of increasing open interest is a signal that a price rally will not continue as such implies that the move up was led by short-covering rather than new buyers accumulating and holding length.
1,800,000
1,700,000
1,600,000
1,500,000
1,400,000
1,300,000
1,195,159
1,100,000
1,000,000
VOLUME
Similarly, daily volume has been declining and trending lower overall. Daily volume should be increasing in upside rallies as new buyers come in. This is another possible tell-tale sign that the current rally may soon begin to fade.
400,000
350,000
300,000
250,000
200,000
150,000
100,000
36,891
MACD
The MACD ("Moving Average Convergence Divergence") has recently crossed over and turned negative. Yet another bearish signal.
0.1500
0.0510
-0.0194
-0.0500
2020
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2021
Feb
Mar
Apr
May
Jun
1 Day


DAILY CONTINUATION - CRUDE OIL
The crude market looked like it was trying to break down for some much needed downside correction last week when the prompt month contract broke out of the uptrend channel. But then prices rebounded higher today with prices closing $2.35ish from Friday's closing price. The crude market has been a lot like the equity markets over the last several months as virtually every downside break and hint of weakness is met sooner or later with new buyers coming back in instead of follow-through lower on the weakness. So for now crude just doesn't look like it wants to head lower. However, the mid-May to mid-June time-frame is historically a period when the crude market rolls over and heads lower into 3Q. That may or may not be the case this year. But we don't like to buck historically-strong seasonal tendencies - so our gut-feel says crude finally gets a decent selloff within the next three weeks.
Fundamentally, the biggest threat to continued high prices is likely the possibility that over 1 million bbls/d of Iranian crude could soon return to the market as a deal with the U.S. on lifting sanctions with a nuclear accord may soon come to fruition. Other than such, the next-best risk for lower is that OPEC's plan to slowly begin returning barrels to the market more aggressively in the coming months outpaces global demand - especially with a big importer like India not being able to contain Covid outbreaks.
First resistance is the most recent high of $67.01 and with next resistance at the $67.98 high from early March. A break above the $67.98 area likely allows for a test of the psychological $70 area - at least for a print there even if not sustainable.
Broken or reset uptrend channel?
$67.98 resistance
67.98 (0.0%)
$67.01 resistance
$61.56 support
$57.25 support
54.86 (38.2%)
50.81 (50.0%)
46.76 (61.8%)
40.99 (78.6%)
33.64 (100.0%)
9 Day
30 Day
100 Day
The break lower penetrated the support line of the uptrend channel. Typically, the next technical move lower should have been follow-through lower this week as well. So today's strong move back up is a slight head-scratcher if it doesn't end up being a one day wonder. Regardless, a subsequent move back below the 30 day average and then further weakness below last Friday's $61.56 low likely targets the $57.25 or maybe even the $55.89 (38% Fib) on what would be described as a corrective move more so than a long term bearish signal.
DTN ProphetX®
95.00
90.00
85.00
80.00
75.00
70.00
65.95
63.85
59.77
55.00
50.00
45.00
40.00
35.00
30.00
80.00
56.09
20.00
0.00
Jul 2020
Sep
Oct
Nov
Dec
2021
Feb
Mar
Apr
May
Jun
Jul
1 Day

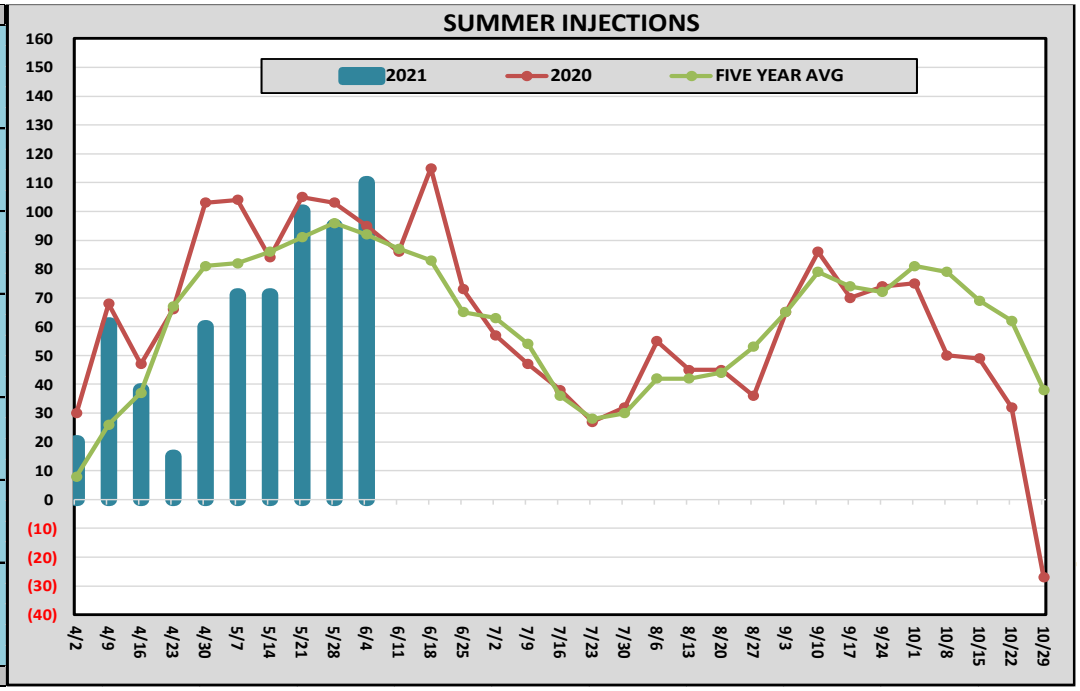
The EIA weekly storage figure came in a 71 bcf last week against general market expectations of 65 - so a relatively bearish report. This brings total storage levels to 2,100 bcf and with such level equating to a 391 bcf deficit to last year and is 87 bcf below the five-year average.

The next three weeks look to incur large injections which is typical for this time of year with heating demand long gone and any significant cooling demand not showing up until later in June. The three weeks through the week ended June 4th are likely to see total injections of 305 bcf. And if valid, this would bring total storage levels to 2,405 bcf which would then provide for respective deficits of 389 and 61 bcf.

Note the graph below - weekly builds have been trailing last year and the five-year most of April and early May. But this year's injections will begin to catch up if forward estimates are correct.

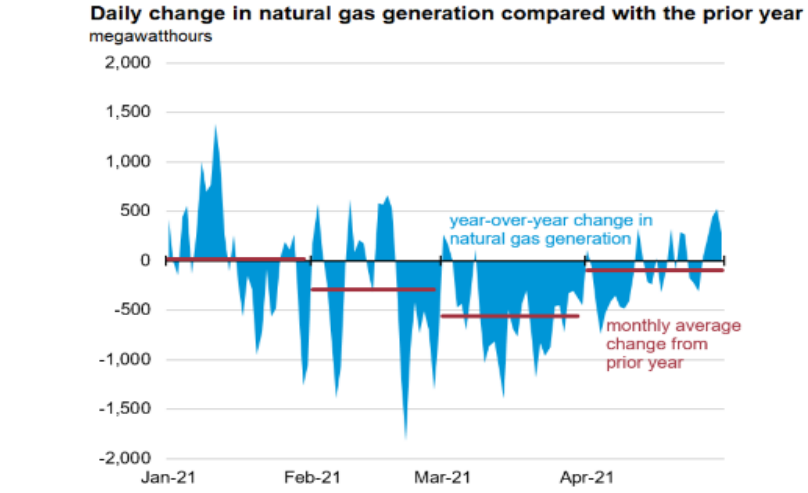


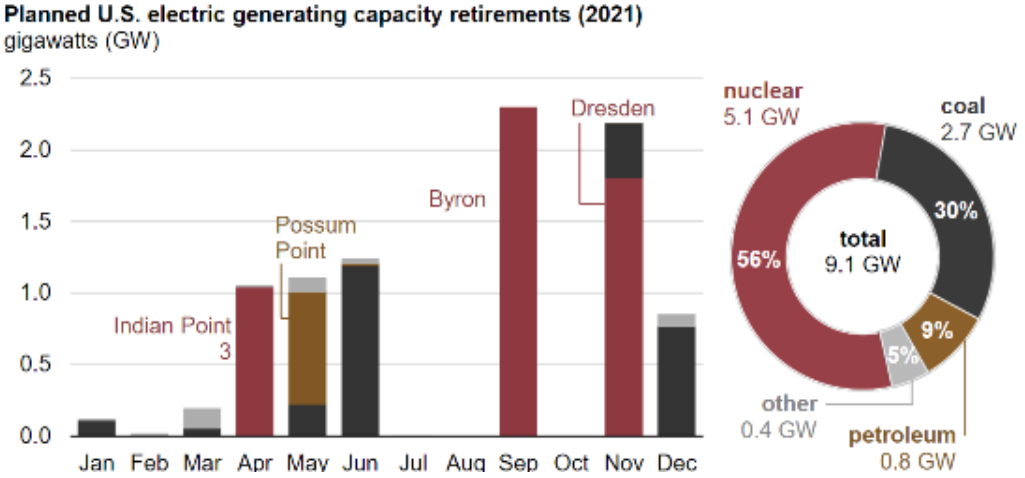
	2021	2020	FIVE YEAR AVG
4/2	20	30	8
4/9	61	68	26
4/16	38	47	37
4/23	15	66	67
4/30	60	103	81
5/7	71	104	82
5/14	71	84	86
5/21	100	105	91
5/28	95	103	96
6/4	110	95	92
6/11		86	87
6/18		115	83
6/25		73	65
7/2		57	63
7/9		47	54
7/16		38	36
7/23		27	28
7/30		32	30
8/6		55	42
8/13		45	42
8/20		45	44
8/27		36	53
9/3		65	65
9/10		86	79
9/17		70	74
9/24		74	72
10/1		75	81
10/8		50	79
10/15		49	69
10/22		32	62
10/29		(27)	38
AVG	641	2,606	1,912
Estimate			

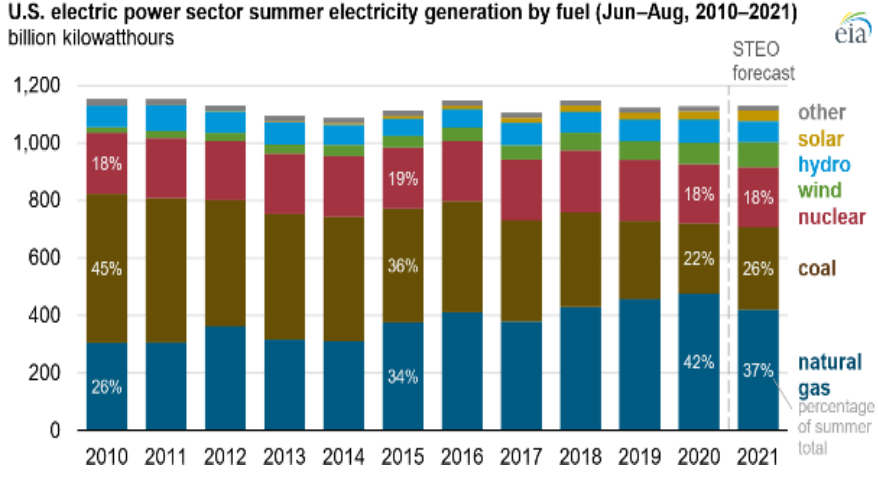


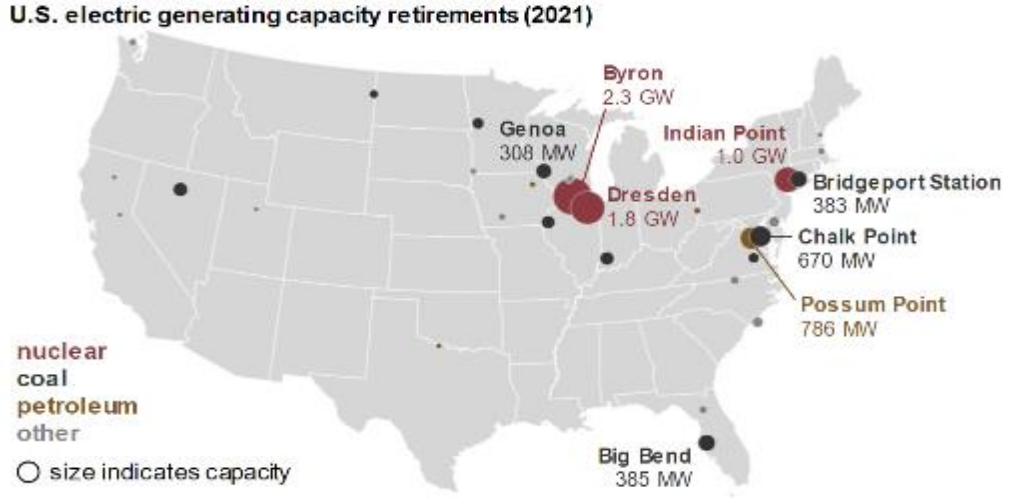
As we've outlined several times recently, natural gas could lose as much as 3.3 bcf/d to gas-to-coal this year on a weather-normal basis. We are still estimating a lower level of around an average of 2.6ish bcf/d during April-October. The EIA has been estimating in its STEO that gas-fired generation will be 37% of the national generation stack this year - down from 42% in 2020 when gas prices averaged $2.08 for the calendar year. The year-on-year levels are estimated to not be too dramatically lower thus far with January through April down only nominally on an adjusted weather basis. But monthly settlement prices averaged $2.67 over that period.

However, there are almost 9,000 mw of nameplate plant retirements scheduled this year - consisting mainly of 5,100 mw of nuclear plant retirements and 2,700 mw of coal plant retirements. This will allow gas to pick back up some additional generation market share. Unfortunately for demand, Exelon's Byron and Dresden will not be mothballed until later in the year and 2.7 GW of coal being retired has probably only been running at a 30-50% utilization rate in recent years. And the retirement of 1ish GW of oil-plants is mostly meaningless since these are peaking plants only. Nonetheless, these retirements will nominally offset otherwise price-induced demand loss for gas.

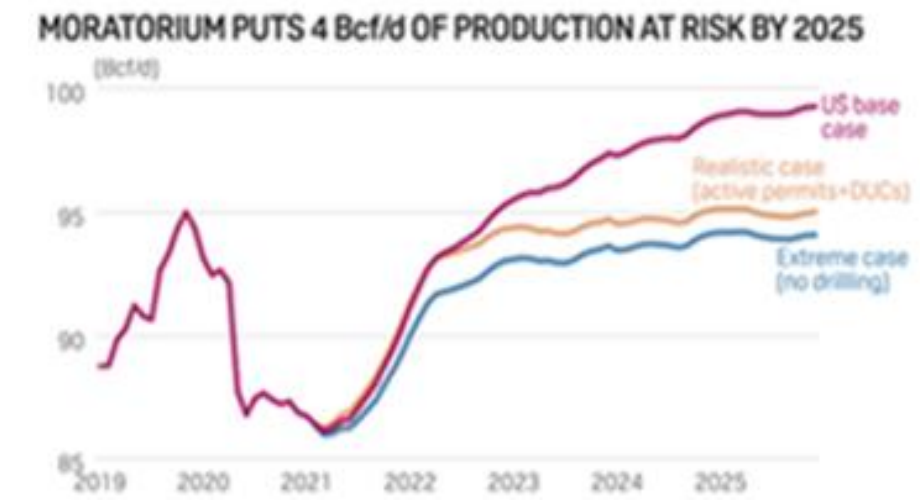


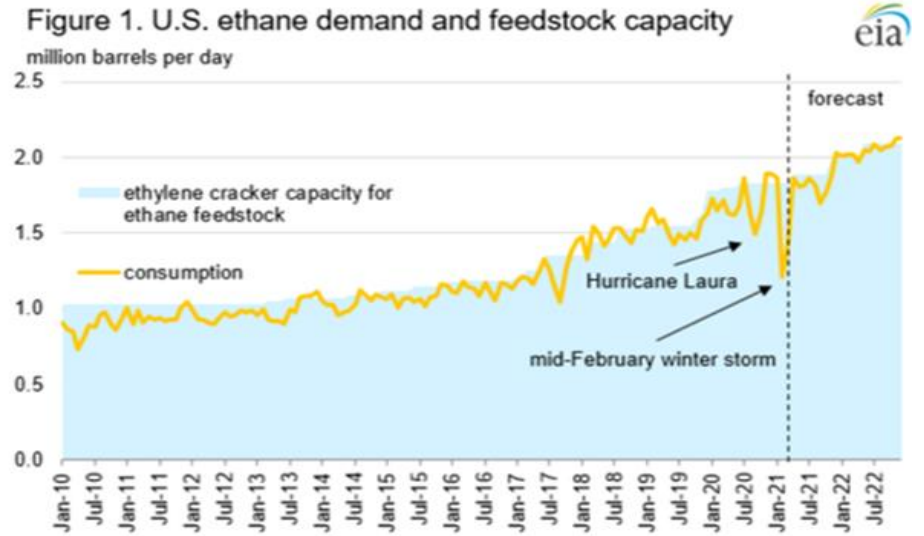


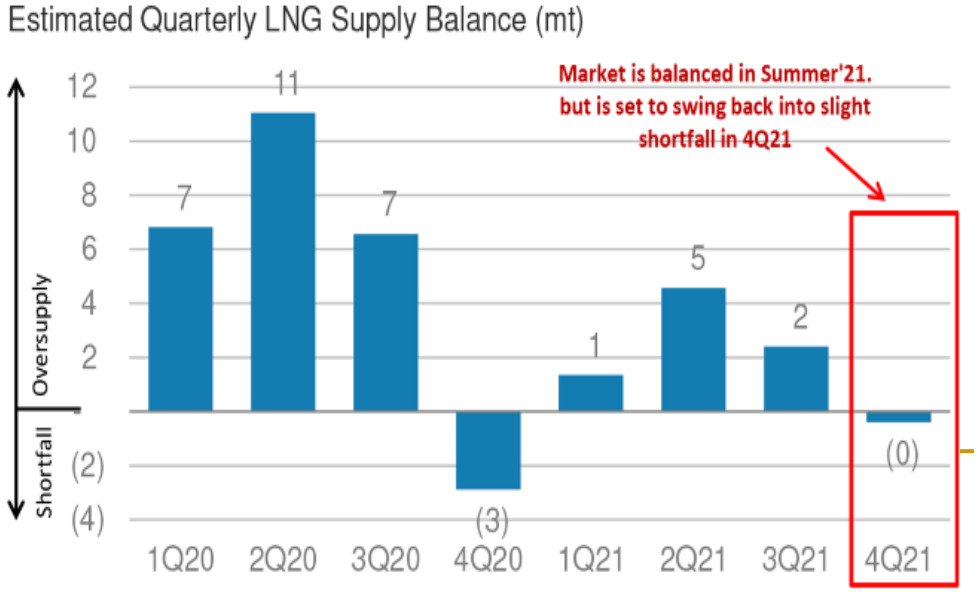


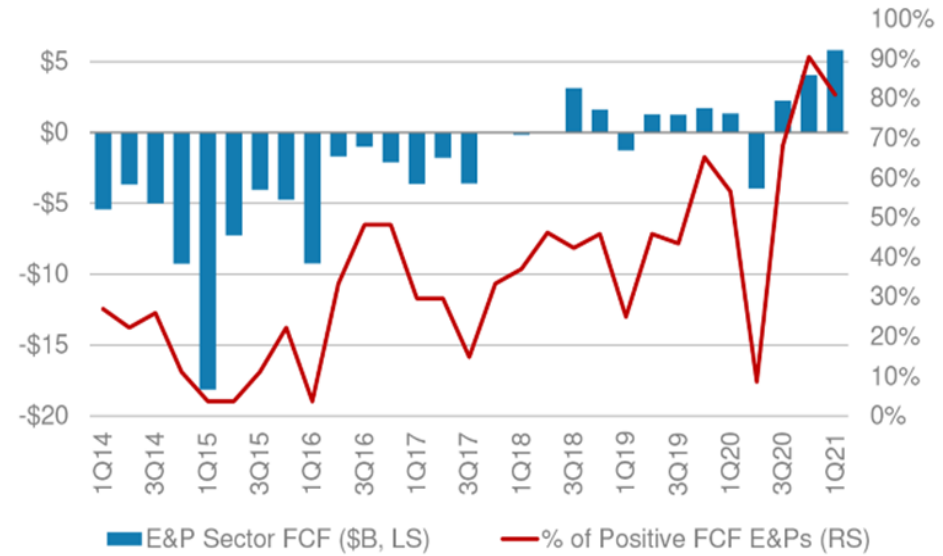


A few quick odds and ends; (i) we mentioned in our last Outlook the recently rally over the last six weeks or so in ethane prices - and such is due to ethane demand increasing once again over the next 12-18 months after a long period of flat demand, (ii) after years of poor capital discipline, the E&P sector has been recently been incurring positive free-cash-flow that will likely not allow for as rapid production growth as previously seen - but makes for a much healthier balance sheets when the next downturn occurs, (iii) many analysts are projecting a tighter global balance for LNG supply and demand by 4Q - but we suspect the ultimate reality of this hinges on whether the economic recovery continues, and (iv) the Biden Administration's war on fossil fuels via restriction on drilling permits on federal lands could cut what would otherwise be a net increase of almost 4 bcf/d in incremental production over the few years (mostly associated gas via oil wells).





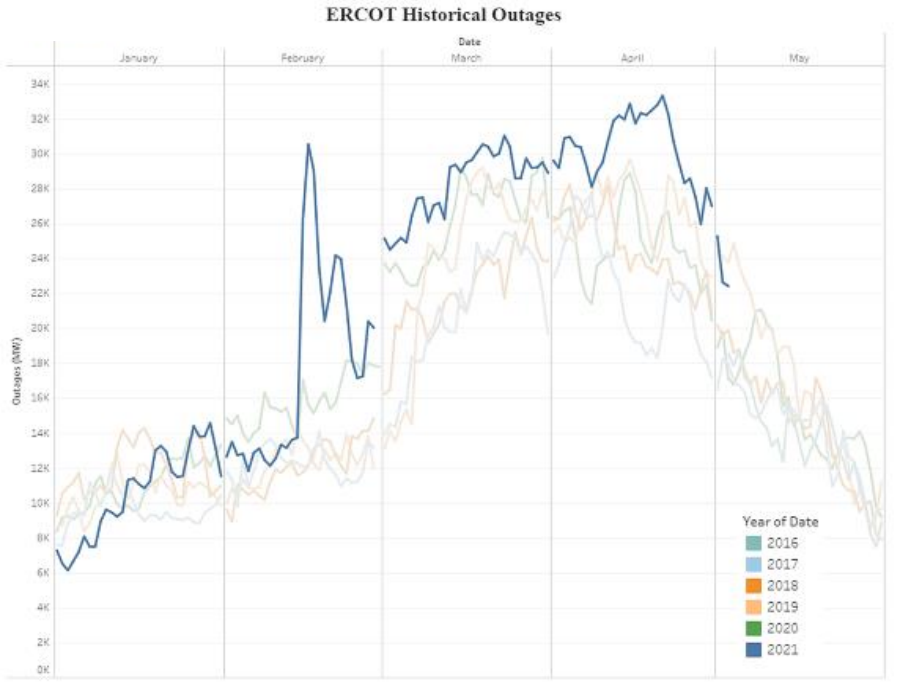


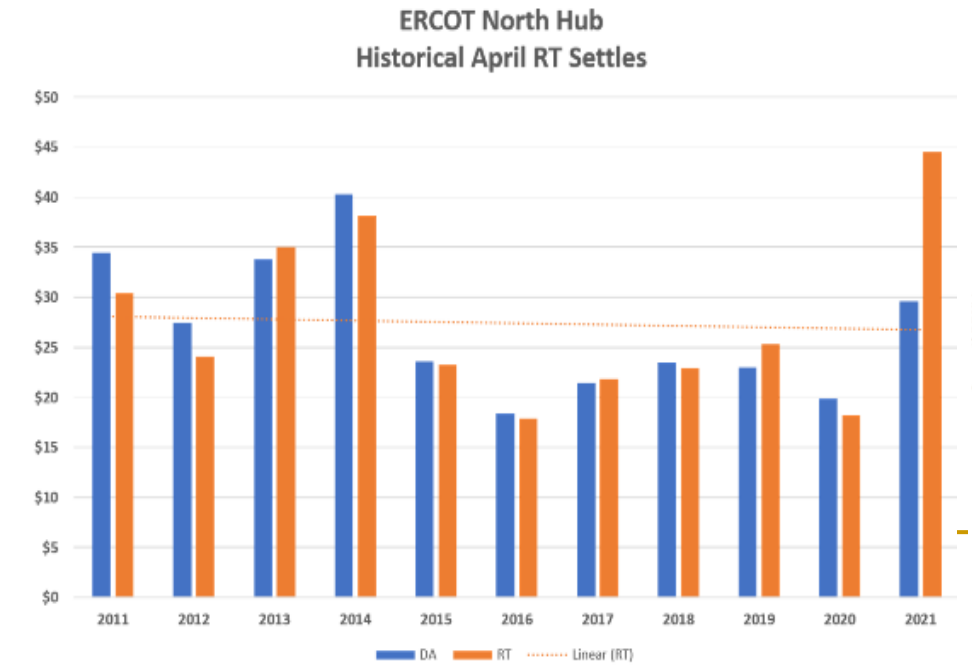


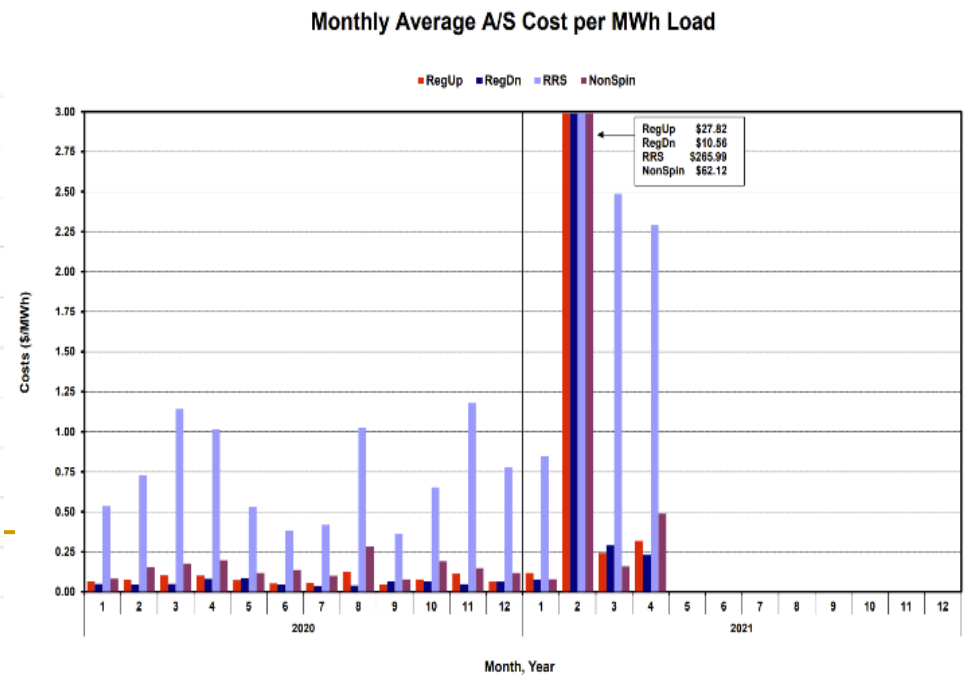
The level of seasonal outages occurring during March and April was extraordinarily high compared to historical-normal outage levels for that time-frame. Such was 4,000 to 7,000 mw above (depending on the year compared to) prior long-term levels. And it is really not discernable as to whether this is the "new normal" with such an abundance of renewables within ERCOT or is due to thermal outages still recovering and doing extra maintenance after the February weather event. In any regard, they were at the highest levels ever seen for that time of year.

And due to these high outage levels, the system-wide average ancillary cost was the highest that we have ever witnessed for these months at $3.18 and $3.33/mw respectively for the two months on a cost-to-serve basis (RRS itself was $2.49 and $2.29 respectively).

And Real-Time energy prices spiked as well in April when a few relatively high demand and low wind-avail days coincided. April averaged $44.48 for North Hub and $59.71 for Houston Hub (again all-time highs for the month) with one day above $300 ATC.





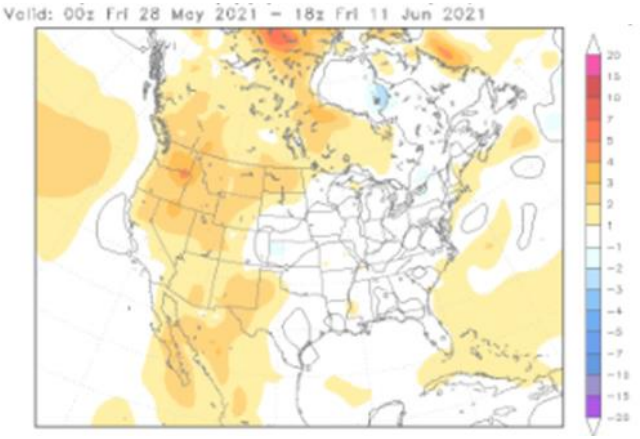


The forward six weeks looks mixed according to the latest Euro Model update - with the East and Midwest above normal but Texas and the South mild-ish. Texas/ERCOT looks really bearish if the forecast ends up being valid. It would seem that it will be difficult for overall national summer temps to beat last summer as such averaged 1.7 degrees above normal. And if not, then expect lower y-o-y power gen demand. But never say never when it comes to weather.

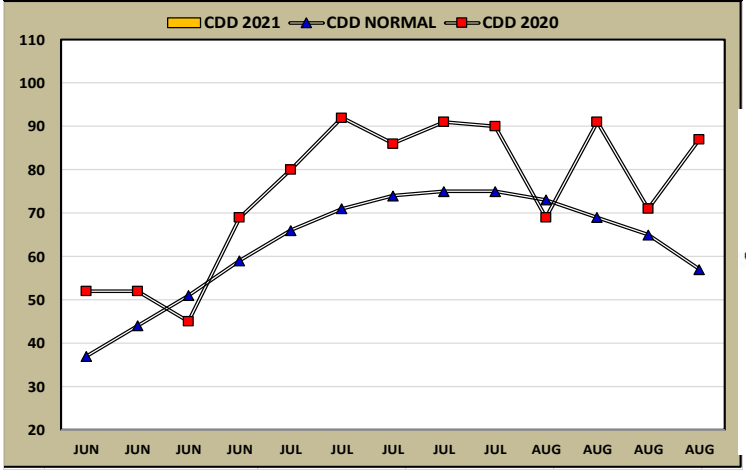
The concern over drought in Texas entering the summer is greatly diminished with the recent heavy rains across the state. Coastal and Eastern Texas had the some of the wettest conditions in 129 years of record-keeping for 5/1 – 5/20. And NOAA's drought monitor will not yet reflect the full effect of such until this coming Thursday's update. But it has been a huge improvement since March.

European Weeklies Summary (05/24/2021):

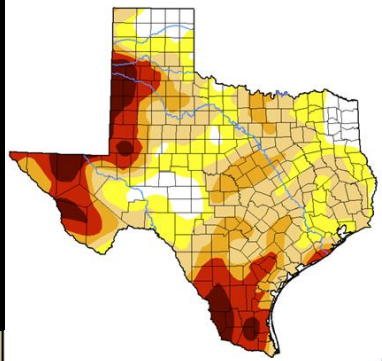
Anomalies	5/24-5/30	5/31-6/6	6/7-6/13	6/14-6/20	6/21-6/27	6/28-7/4
East Coast	-0.3	+1.0	+3.9	+2.9	+2.4	+2.2
Midwest	-2.0	+1.0	+2.8	+2.2	+2.0	+2.1
Texas	-1.4	-3.2	-1.8	-1.4	-1.2	-1.0
Deep South	+0.0	-1.9	-0.5	+0.2	-0.2	+0.2
Southwest	+1.6	+0.3	-0.9	-0.3	+0.8	+0.3
California	+0.9	+3.8	+0.0	+0.0	+0.9	+0.6
Pacific Northwest	-2.0	+5.6	+0.2	+0.1	+0.2	-0.1
Western Europe	-1.1	-1.2	-0.9	-0.4	+0.0	-0.1
Asia	-0.8	+0.3	+1.1	+0.6	+0.5	+0.7



	CDD NORMAL	CDD 2020	CDD 2021
JUN	37	52	
JUN	44	52	
JUN	51	45	
JUN	59	69	
JUL	66	80	
JUL	71	92	
JUL	74	86	
JUL	75	91	
JUL	75	90	
AUG	73	69	
AUG	69	91	
AUG	65	71	
AUG	57	87	
TOTALS	816	975	0
CUM-TO-DATE	816	975	0
CDD DELTA	NA	159	-816
# OF DAYS	NA	91	
AVERAGE CDD DELTA	NA	1.7	



Mar 25th



May 20th