Energy Market Insights

August 2020

New England

Mid-Atlantic

California

Mexico

New York

Midwest

Texas

New England

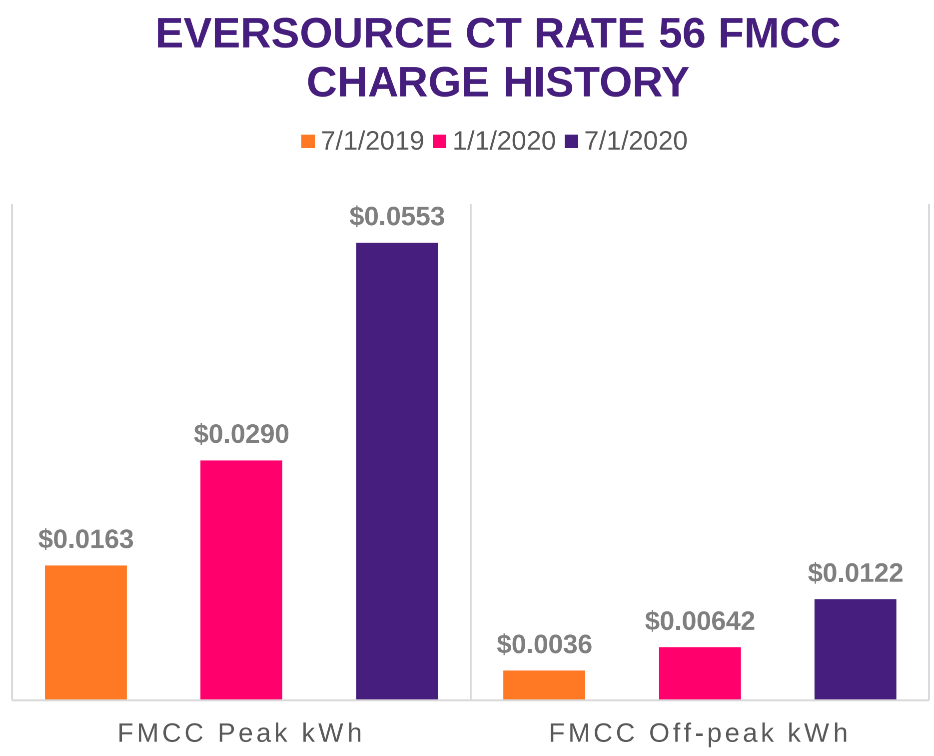
August 2020

< back to beginning

Insight of the Month

Regulators suspend recent Eversource CT rate hike amidst investigation

- On July 31, Connecticut state regulators temporarily suspended an unprecedented Eversource rate increase that went into effect on July 1
- Taking effect no later than August 7, this suspension means that Eversource CT customers will be charged at prior rates
- The charge in question is the Federally Mandated Congestion Charge (FMCC), which jumped to ~5.5 cents/kWh for on-peak volumes on July 1; This was up ~4 cents/kWh year-over-year (shown to the right)
- Eversource cites payments for the Millstone Nuclear Power Plant Power Purchase Agreement (PPA), in addition to increased summer temperatures, as factors underpinning the increased charge
- The Millstone Nuclear Power Plant PPA, signed in late-2019 for a 10-year term, is structured as a contract-for-differences in which utilities and subsequently customers may assume additional costs if revenues fall short of the guaranteed PPA rate of 4.999 cents/kWh
- CT United Illuminating did not adjust July delivery rates to reflect additional costs from the Millstone PPA and reportedly has no plans to do so, prompting calls for an investigation into the Eversource rate increases



KEY TAKEAWAY: As a rapidly evolving situation in Connecticut, it is currently unclear how PURA (the State of Connecticut Public Utilities Regulatory Authority) will address the steep Eversource rate increases in the long-term. In the short-term, however, PURA's suspension of Eversource's July 1 rate changes means Eversource customers will be charged at prior rates. Even at the scaled back tariff, large C&I customers will stay pay roughly 1 cent per kWh, or 15%, more on their utility bills year-over-year.

ISO-NE Power Prices

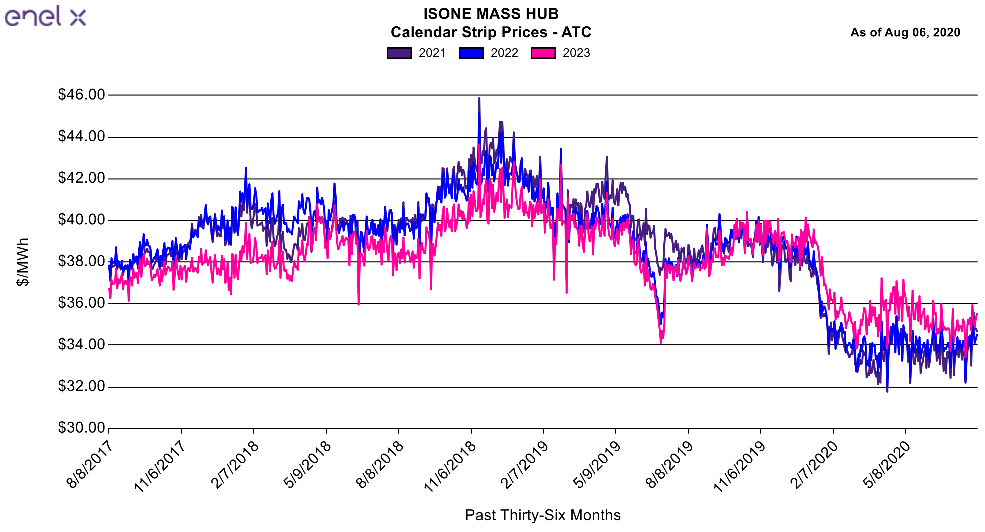
Forward prices bounce from all-time lows

Where are forwards trending?

- Summer heat in late-July pushed CY2021-22 power prices near YTD highs of $35/MWh in early-August, up about $2-$3/MWh from recent lows
- Prices have been fluctuating between $32-35/MWh since April, and are likely to face near-term resistance once again at the $35/MWh level
- Milder temperatures are expected in the second half of August, but should forecasts reverse, it would be enough to push prices past the $35 mark

Where are index prices trending?

- Day-ahead prices rose ~$3.50/MWh month-over-month in July to an average of $23.40/MWh, fueled by seasonal trends
- Despite the increase, it was the lowest average spot price for the month of July in the past 9 years



Average Monthly Day Ahead LMP - MassHub

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Jan	$40.59	$86.53	$168.81	$71.14	$38.60	$40.30	$108.75	$56.76	$26.45
Feb	$30.92	$122.31	$156.02	$122.77	$29.90	$30.02	$39.58	$35.62	$23.06
Mar	$26.16	$53.09	$111.16	$64.25	$20.63	$35.75	$35.38	$38.07	$17.18
Apr	$25.88	$42.89	$44.98	$28.43	$28.36	$29.23	$45.00	$26.97	$18.36
May	$25.88	$40.31	$36.95	$24.92	$21.24	$27.31	$24.04	$24.21	$16.48
Jun	$34.75	$37.09	$37.92	$21.16	$22.61	$25.48	$26.82	$22.09	$19.84
Jul	$41.88	$52.07	$37.50	$26.44	$31.12	$27.60	$32.89	$29.78	$23.40
Aug	$38.53	$34.72	$30.35	$30.06	$35.54	$24.90	$39.16	$25.69	
Sep	$31.53	$40.43	$34.10	$30.82	$28.62	$23.57	$33.89	$21.14	
Oct	$35.27	$33.94	$32.19	$37.01	$21.98	$29.74	$38.46	$20.75	
Nov	$54.96	$45.21	$47.71	$29.42	$24.98	$33.98	$57.43	$32.29	
Dec	$46.30	$92.96	$43.00	$22.42	$53.28	$71.31	$47.31	$40.98	
Avg	**$36.05**	**$56.79**	**$65.06**	**$42.40**	**$29.74**	**$33.27**	**$44.06**	**$31.20**	**$20.68**

New England – Gas Prices

Algonquin Basis forwards continue trading sideways after 50% plunge YTD

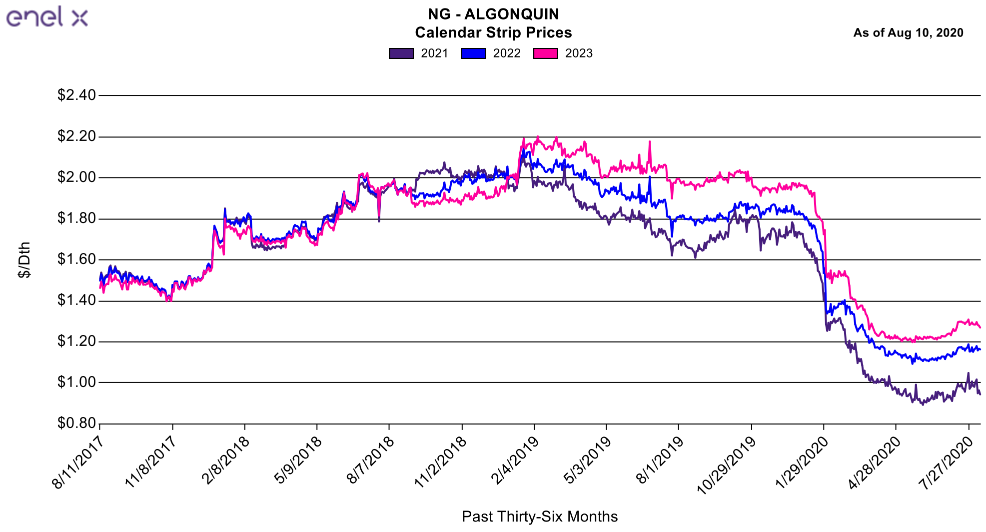
Where are forwards trending?

- Algonquin Basis for CY 2021-23 prices bottomed at ~$0.90 / $1.10 / $1.20/MMBtu, respectively, in mid-May and have since seen a soft rebound
- Forward basis strips fell an average of 50% over the first five months of the year as a notably absent winter and a steep drop in global LNG and oil prices (which are backup fuels for natural gas power plants in the northeast) weighed on prices
- Prices for the CY 2021-23 strips are trading just 5 cents above all-time contract lows

Where are index prices trending?

- Algonquin daily prices averaged $(0.06)/MMBtu in July
- Despite averaging the narrowest discount to Henry Hub this summer (June & July) in six years, daily prices are still set to reach a new annualized low in 2021

This is a generic wholesale curve to New England. Pricing does not reflect locational adjustments, utility tariff designations or rate class adjustments specific to your facility. For more detailed pricing please contact your Enel X representative.



Average of Daily Prices - Algonquin Basis Only									
	2012	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Jan	$2.67	$7.29	$20.09	$6.35	$2.26	$1.77	$11.90	$3.87	$0.82
Feb	$1.12	$14.57	$15.19	$14.68	$1.49	$0.90	$1.75	$1.53	$0.39
Mar	$0.63	$2.98	$10.41	$5.19	$0.18	$1.68	$1.32	$1.14	($0.17)
Apr	$0.44	$0.91	$0.18	$0.58	$1.04	$0.04	$2.22	($0.04)	($0.05)
May	$0.20	$0.41	($0.71)	($0.96)	$0.22	($0.07)	($0.42)	($0.27)	($0.31)
Jun	$0.99	$0.53	($0.52)	($1.07)	($0.24)	($0.49)	($0.31)	($0.22)	($0.04)
Jul	$0.88	$1.04	($0.94)	($0.83)	($0.03)	($0.46)	$0.03	($0.02)	($0.06)
Aug	$0.56	$0.08	($1.15)	($0.42)	$0.33	($0.52)	$0.24	($0.14)	
Sep	$0.48	$0.18	($0.74)	$0.15	($0.37)	($1.05)	($0.01)	($0.56)	
Oct	$0.40	$0.17	($0.95)	$1.36	($0.67)	($0.10)	$0.00	($0.57)	
Nov	$3.39	$2.81	$2.10	$1.21	$0.08	$0.30	$2.02	$0.71	
Dec	$2.56	$8.96	$2.61	$0.33	$3.18	$6.59	$1.84	$2.42	
Avg	**$1.19**	**$3.33**	**$3.80**	**$2.21**	**$0.62**	**$0.72**	**$1.71**	**$0.65**	**$0.08**

New York

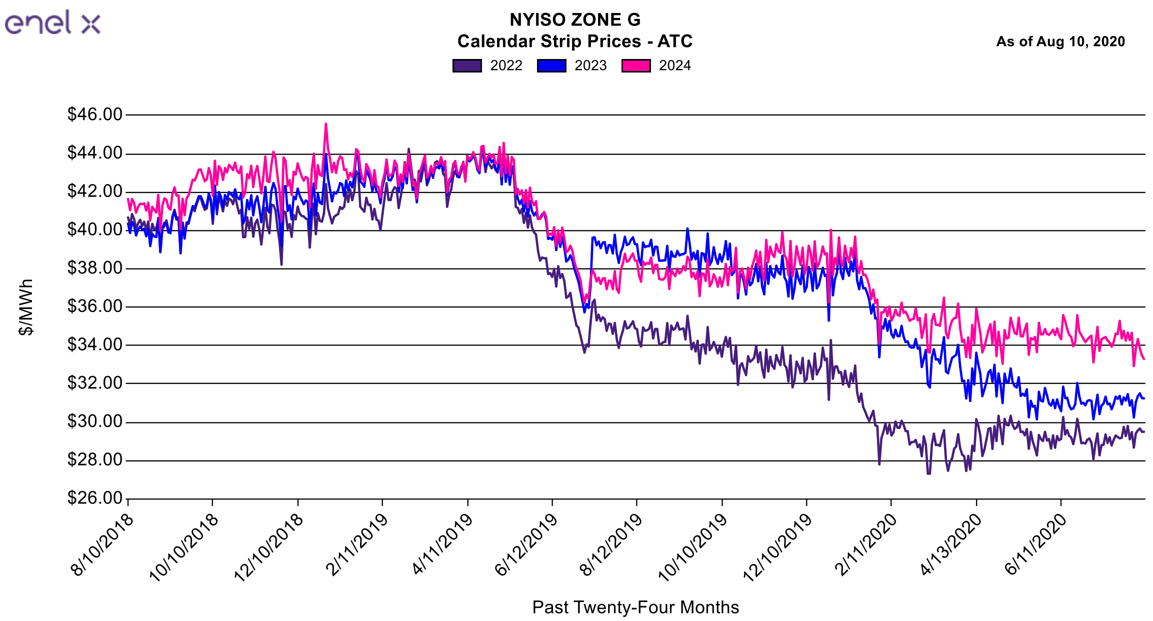
August 2020

< back to beginning

Insight of the Month

Upstate power strips showing little impact from carbon price until mid-2023

- Over the past several years, long-range outlooks of forward power indicated an upward trend in pricing in New York, driven by the expected impacts of a carbon price
- Since early January, however, the spread between CY2023 and CY2022 has shrunk across all NYISO zones, with convergence most prominent upstate
  - Spread between CY23 and CY22 is ~$1.50/MWh, down from $4.90/MWh in January
- Zone I, in the Lower Hudson Valley, is actually showing a backwardated curve, as CY2023 is anticipating some transmission upgrades making long-term contracts even more attractive



KEY TAKEAWAY: The uncertainty around a carbon price resulted in a heavy risk premium on long-term wholesale electricity forwards in New York. With the recent drop in forward prices, customers can now take advantage of multi-year lows in 24 – 36 month contracts without paying a significant premium for a regulation that does not have a definitive timeline.

NYC – Power Prices

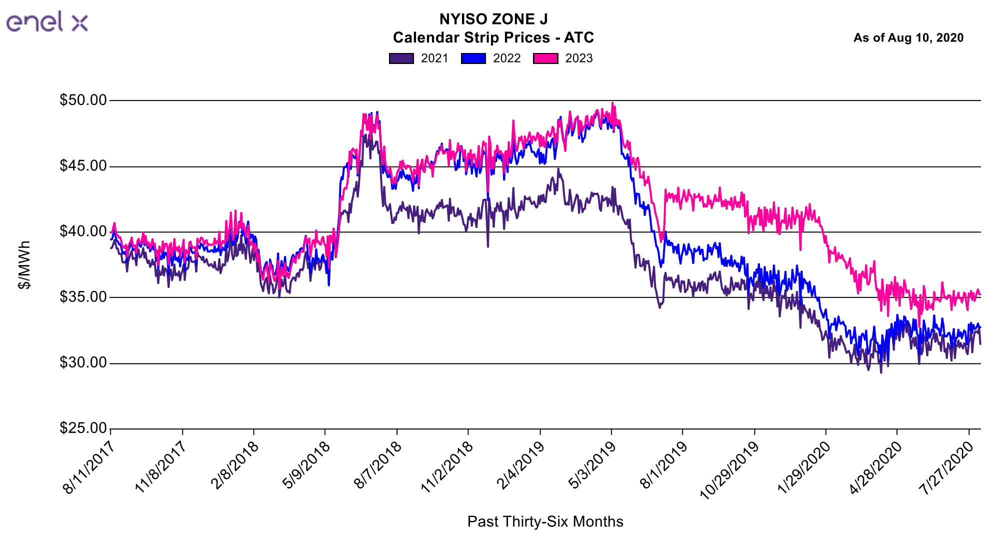
Weather, pandemic, and delays in carbon proposal weigh on prices

Where are forwards trending?

- CY2021 power prices remain largely unchanged from May and June, trading between $30-$32/MWh for the month of August
- Forward power in New York City remains in the bottom 5th percentile of trades over the past 5 years, but a slight jump at the start of August on the back of some lingering heat waves may signal some upward pressure on prices

Where are index prices trending?

- Average DA monthly prices for NYISO – Zone J gained more than $5/MWh, month-on-month for the second consecutive month
- Heat waves in July drove demand to year-to-date highs
- Despite normal peak-demand, average demand in NYC is still down due to impacts of lockdown measures on the economy. As a result, spot prices were the lowest of any July on record.



Average Monthly Day Ahead LMP - NYISO - Zone J									
	2012	2013	2014	2015	2016	2017	2018	2019	2020
Jan	$45.22	$81.20	$175.92	$57.34	$35.04	$40.64	$96.58	$49.20	$25.12
Feb	$33.12	$90.67	$122.84	$112.33	$29.61	$30.55	$34.05	$33.07	$21.26
Mar	$29.67	$48.82	$102.52	$51.26	$20.75	$36.04	$31.98	$35.00	$16.81
Apr	$28.60	$43.94	$46.49	$27.53	$28.62	$32.27	$34.77	$28.82	$15.53
May	$30.48	$45.25	$37.31	$30.35	$23.45	$31.61	$26.96	$23.39	$14.95
Jun	$40.43	$43.65	$39.95	$24.95	$25.47	$30.17	$29.79	$23.41	$19.78
Jul	$50.80	$60.14	$39.79	$30.01	$35.43	$33.57	$36.94	$31.23	$25.30
Aug	$42.05	$40.12	$32.10	$31.10	$35.64	$28.66	$39.36	$26.59	
Sep	$36.85	$39.89	$32.91	$32.45	$27.01	$26.26	$35.52	$21.49	
Oct	$37.79	$37.55	$32.09	$27.68	$20.84	$27.88	$34.70	$19.86	
Nov	$50.32	$40.82	$41.29	$23.34	$25.62	$29.97	$38.60	$26.55	
Dec	$45.53	$61.14	$36.23	$20.24	$46.06	$49.54	$38.63	$28.53	
Avg	$39.24	$52.77	$61.62	$39.05	$29.46	$33.10	$39.82	$28.93	$19.82

Upstate NY – Power Prices

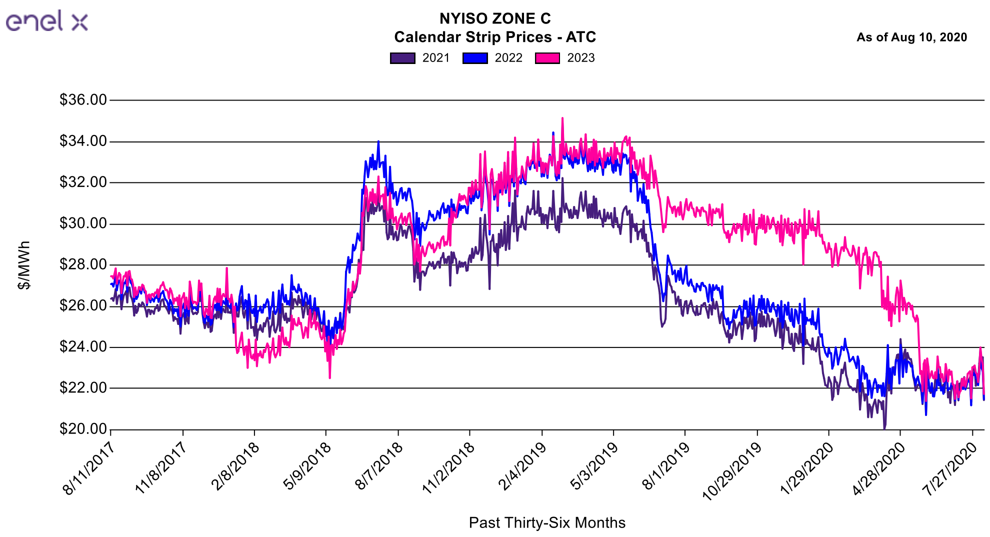
Forward power remains low through June

Where are forwards trending?

- Forwards in NYISO – Zone C have settled into a trading range between $21-$23/MWh, showing little change from June and July
- As Upstate power has found some near-term resistance at $22/MWh level, it continues to trade near all-time lows

Where are index prices trending?

- Prices once again climbed month-on-month, increasing roughly 35% from June to July, as sweltering temperatures drove increased cooling demand
- Coronavirus control measures will continue to counteract weather-driven power demand increases; but index prices will likely remain subdued until the economy fully reopens.



Average Monthly Day Ahead LMP - NYISO - Zone C									
	2012	2013	2014	2015	2016	2017	2018	2019	2020
Jan	$34.93	$49.86	$121.65	$37.81	$21.50	$29.68	$62.19	$35.02	$16.57
Feb	$28.45	$42.80	$80.31	$75.58	$17.63	$24.98	$23.91	$25.74	$16.36
Mar	$24.66	$39.23	$85.79	$37.35	$12.58	$24.47	$22.14	$27.67	$13.99
Apr	$25.07	$37.20	$40.38	$22.80	$22.01	$20.86	$28.14	$21.82	$11.87
May	$27.64	$38.06	$32.23	$25.66	$16.11	$20.28	$22.94	$15.11	$13.08
Jun	$31.66	$34.09	$35.71	$20.24	$21.06	$20.86	$25.51	$15.67	$16.46
Jul	$40.73	$44.94	$34.52	$24.94	$29.31	$25.74	$31.54	$25.27	$22.06
Aug	$34.98	$32.75	$29.40	$25.43	$30.40	$22.71	$32.87	$22.40	
Sep	$32.46	$34.30	$28.79	$25.14	$22.75	$21.72	$29.40	$16.90	
Oct	$34.26	$33.65	$29.30	$24.02	$18.27	$20.67	$29.50	$16.49	
Nov	$42.82	$33.80	$34.18	$16.32	$21.58	$23.18	$31.86	$19.75	
Dec	$33.10	$46.29	$31.50	$13.65	$25.79	$33.62	$31.12	$19.76	
Avg	$32.56	$38.91	$48.65	$29.08	$21.58	$24.06	$30.93	$21.80	$15.77

New York – Gas Prices

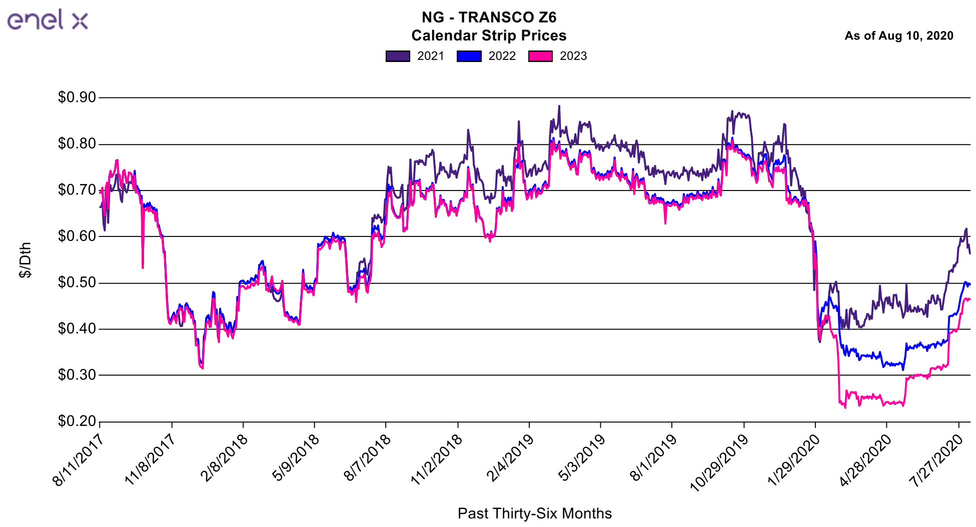
CY2021 Transco Z6 NY Basis Remains below $0.50/MMBtu

Where are forwards trending?

- Transco Z6 NY CY2021 strip finished the month of July around ~$0.60/MMBtu, nearly a 30% increase from the month of June
- The full-value strip has also pushed higher, as NYMEX returned to highs last seen around April (combined increase of ~$0.30/MMBtu)
- Lingering heat in the Northeast is increasing gas demand for power burn and some international markets are signaling a renewed interest in LNG shipments

Where are index prices trending?

- Daily prices averaged $1.69/MMBtu in July, representing about a ~18% increase M-o-M
- Despite the slight uptick, it was the lowest average spot price for the month of July in the past 9 years



Average of Daily Prices - Transco Z6 NY Full Value

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Jan	$5.08	$10.00	$27.66	$7.24	$3.82	$3.82	$18.73	$6.02	$2.20
Feb	$3.15	$10.69	$11.27	$16.01	$3.09	$2.85	$3.21	$2.85	$1.87
Mar	$2.35	$4.20	$8.24	$3.67	$1.29	$3.44	$2.83	$2.91	$1.49
Apr	$2.13	$4.64	$4.13	$2.22	$1.57	$2.81	$2.79	$2.37	$1.51
May	$2.58	$4.18	$3.49	$2.60	$1.56	$2.80	$2.56	$2.28	$1.35
Jun	$2.67	$3.92	$3.22	$2.35	$1.83	$2.34	$2.78	$2.11	$1.43
Jul	$3.17	$3.98	$2.72	$1.98	$2.14	$2.44	$2.88	$2.17	$1.69
Aug	$3.00	$3.45	$2.38	$2.37	$2.03	$2.17	$3.00	$1.87	
Sep	$2.94	$3.71	$2.25	$2.09	$1.34	$2.29	$2.74	$1.75	
Oct	$3.46	$3.65	$2.09	$2.22	$1.12	$2.32	$2.89	$1.53	
Nov	$3.97	$3.83	$3.88	$1.77	$2.10	$2.91	$4.18	$2.62	
Dec	$4.54	$5.25	$3.25	$1.58	$4.37	$5.67	$4.12	$2.56	
Avg	**$3.25**	**$5.13**	**$6.21**	**$3.84**	**$2.19**	**$2.99**	**$4.39**	**$2.59**	**$1.65**

Mid-Atlantic

August 2020

< back to beginning

Insight of the Month

PJM Virginia 3rd Party Supply Update

- On July 2, 2020, the Virginia State Corporation Commission (SCC) filed for approval of the 100% renewable energy tariff
- In this tariff, Dominion customers can “choose to purchase 100% of their energy and capacity needs” from renewable energy resources under the Dominion TRG Rider
- Under this filing, Dominion customers under 5 MW are no longer allowed to purchase 100% renewable power through 3rd party suppliers, only through Dominion itself
- On July 9, 2020, the VA Supreme Court rejected WalMart’s request to aggregate 90 MW to be eligible to go to 3rd party supply in Virginia, further discouraging other large retailers from similar aggregations

KEY TAKEAWAY: Customers in Virginia with peak demand under 5 MW no longer have the option of procuring power from a 3rd party supplier. Dominion will continue to operate under a semi-regulated energy market, with competitive supply still an attractive opportunity for large power consumers with demand greater than 5 MW.

PJM – Power Prices

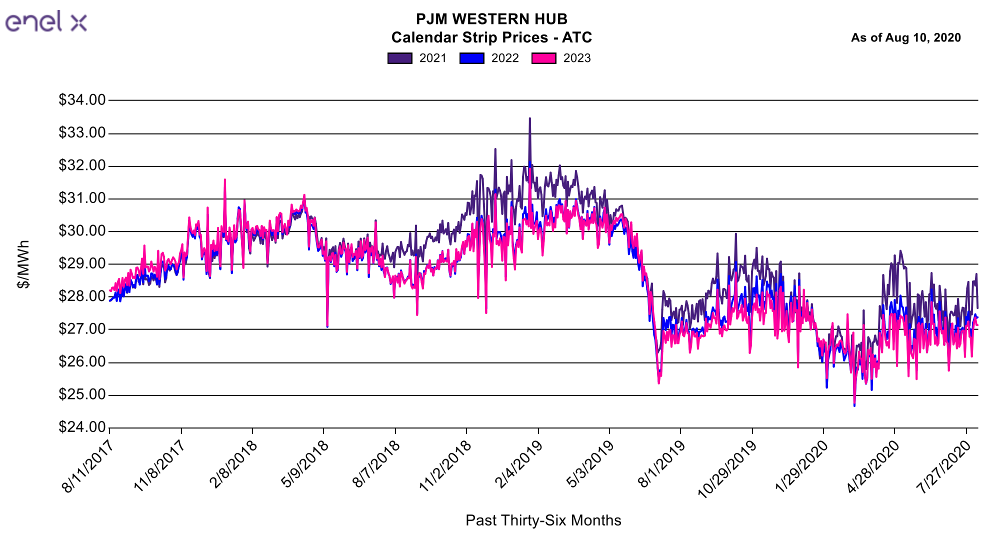
PJM Westhub forwards continue to trade sideways

Where are forwards trending?

- PJM West Hub forwards remain flat over the past three months
- Drop in power and natural gas demands due to COVID were partially offset by a very warm July where cooling load increased above average
- One month and three month forecasts predicted to be slightly warmer than average in the Mid-Atlantic which could provide slight upward movement in power prices

Where are index prices trending?

- Day Ahead monthly prices at PJM WestHub continue to settle at all time lows, including July 2020 with temperatures far above average
- Monthly average LMPs are expected to settle at or near all time lows through the rest of the summer



Average Monthly Day Ahead LMP - WestHub

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Jan	$33.99	$36.01	$132.05	$38.62	$30.99	$31.24	$72.91	$33.57	$22.03
Feb	$31.61	$36.23	$71.44	$75.79	$28.48	$26.51	$27.61	$27.28	$19.89
Mar	$29.86	$40.19	$69.56	$39.94	$25.49	$31.66	$33.69	$29.82	$18.63
Apr	$30.34	$39.76	$41.45	$32.99	$30.00	$29.41	$35.25	$25.76	$17.38
May	$31.54	$39.37	$42.04	$34.74	$24.30	$29.14	$35.50	$25.30	$17.38
Jun	$33.35	$37.27	$40.79	$31.57	$26.34	$26.16	$29.64	$22.61	$18.53
Jul	$41.09	$47.37	$37.23	$34.07	$32.38	$28.88	$32.27	$27.64	$25.42
Aug	$34.08	$34.66	$34.46	$30.45	$32.60	$27.08	$32.23	$24.30	
Sep	$33.17	$36.31	$35.63	$30.25	$30.76	$29.99	$32.71	$26.15	
Oct	$35.25	$35.83	$35.34	$31.46	$30.20	$29.34	$33.21	$25.02	
Nov	$39.47	$36.48	$39.43	$27.71	$26.81	$30.23	$37.34	$29.22	
Dec	$32.81	$41.20	$33.31	$25.42	$32.13	$36.70	$33.79	$23.63	
Avg	**$33.88**	**$38.39**	**$51.06**	**$36.08**	**$29.21**	**$29.70**	**$36.34**	**$26.69**	**$19.89**

PJM – Gas Prices

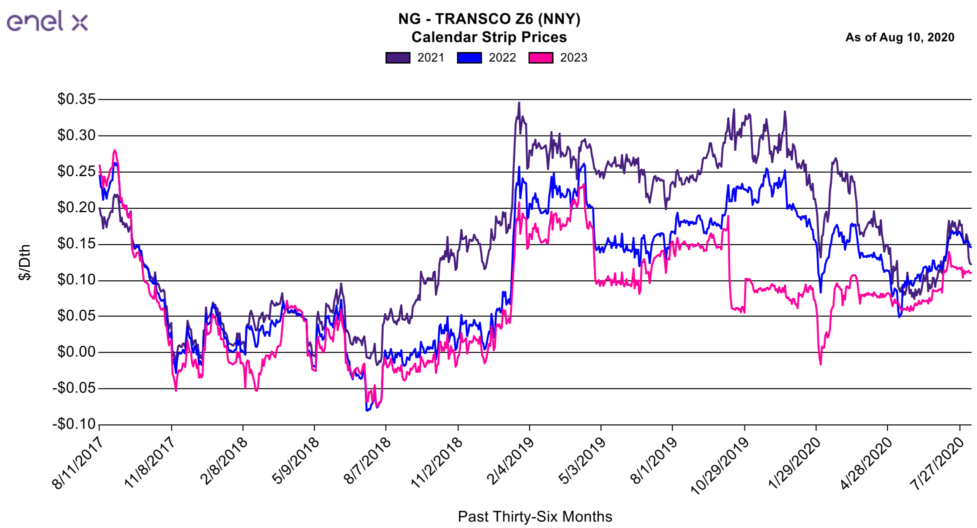
Transco Z6 xNY soften in early-Aug after two-month rally

Where are forwards trending?

- Transco Zone 6 xNY forward basis has jumped around $0.05/Dth over the past month with more natural gas generation needed to meet higher demands
- Basis prices in the Mid-Atlantic normally jump leading up to the winter, although this year could buck the trend as gas storage is plentiful and overall demands are lower due to COVID

Where are index basis prices trending?

- Average daily basis prices for Transco Z6 xNY increased slightly in July 2020 due to higher demands for natural gas generation to meet warm weather summer loads
- East region natural gas storage is 13% above the 5-year average and 20% higher than last year at this time, which could alleviate potential congestion for Winter 20/21



Average of Daily Prices - Transco z6 xNY Basis Only									
	2012	2013	2014	2015	2016	2017	2018	2019	2020
Jan	$0.64	$1.42	$20.61	$2.13	$0.92	$0.24	$13.07	$1.08	$0.15
Feb	$0.34	$0.66	$2.62	$11.20	$0.69	($0.10)	$0.42	$0.07	($0.03)
Mar	$0.12	$0.28	$1.18	$0.73	($0.38)	$0.30	$0.13	($0.02)	($0.26)
Apr	$0.17	$0.17	($0.34)	($0.36)	($0.33)	($0.24)	$0.01	($0.25)	($0.19)
May	$0.12	$0.10	($1.04)	($0.21)	($0.29)	($0.30)	($0.22)	($0.33)	($0.34)
Jun	$0.14	$0.03	($1.35)	($0.35)	($0.60)	($0.55)	($0.15)	($0.25)	($0.15)
Jul	$0.20	$0.12	($1.34)	($0.71)	($0.61)	($0.49)	$0.07	($0.14)	($0.03)
Aug	$0.13	$0.08	($1.49)	($0.36)	($0.67)	($0.62)	$0.08	($0.30)	
Sep	$0.10	$0.10	($1.68)	($0.48)	($1.43)	($0.64)	($0.22)	($0.78)	
Oct	$0.12	($0.02)	($1.63)	($0.11)	($1.57)	($0.56)	($0.37)	($0.72)	
Nov	$0.35	$0.27	($0.21)	($0.27)	($0.31)	($0.14)	$0.04	($0.01)	
Dec	$0.40	$0.64	($0.02)	($0.28)	$0.13	$2.17	$0.08	$0.23	
Avg	**$0.24**	**$0.32**	**$1.28**	**$0.91**	**($0.37)**	**($0.08)**	**$1.08**	**($0.12)**	**($0.12)**

Midwest

August 2020

< back to beginning

Insight of the Month

Ohio HB-6 Nuclear subsidy in question after legislative scandal

- Ohio’s House Bill 6, a 2019 law that established $1.2 billion subsidies for two Ohio nuclear plants, faces potential repeal and replacement after bribery claims lead to the arrest of Ohio Speaker of the House Larry Householder
- HB-6 includes a provision to reimburse nuclear facilities owned by Energy Harbor (formerly First Energy) $150M annually, to be recovered from ratepayers
- The recovery charges for HB-6, slated to begin in 2021, were limited to $0.85/Month for residential customers and $2,400/month for industrial customers
- HB-6 slashed Ohio’s Renewable Portfolio Standards and Energy Efficiency programs, both of which may be reinstated if HB-6 is repealed
- A busy legislative docket, COVID-19 and the election year all complicate the timeline for the repeal and replacement of House Bill 6. It is uncertain whether a repeal and replacement bill will occur simultaneously, or whether the replacement will come after the repeal

KEY TAKEAWAYS AND IMPLICATIONS:

- HB-6 recovery charges, originally planned for 2021, are likely to be removed or scaled back
- HB-6 removed a number of renewable requirements that may be re-introduced, adding to overall customer costs
- At this time, capacity charges are unlikely to be impacted significantly, as recent changes to PJM rules do not allow subsidized generators to clear in the capacity market
- If a replacement bill fails to materialize, and the nuclear facilities become uneconomical and close, spot price volatility may increase and imports from out of state would add to costs*

Ohio’s Pre-House Bill 6 RPS Benchmark Changes. A Replacement House Bill 6 Will Likely Reinstate Crossed-Out Standards.

By End of Year	Renewable Energy Resources	Solar energy Resources
2009	0.25%	0.00%
2010	0.50%	0.01%
2011	1%	0.03%
2012	1.50%	0.06%
2013	2%	0.09%
2014	2.50%	0.12%
2015	2.50%	0.12%
2016	2.50%	0.12%
2017	3.50%	0.15%
2018	4.50%	0.18%
2019	5.50%	0.22%
2020	~~6.5~~ 5.5%	~~0.26~~ 0%
2021	~~7.5~~ 6%	~~0.3~~ 0%
2022	~~8.5~~ 6.5%	~~0.34~~ 0%
2023	~~9.5~~ 7%	~~0.38~~ 0%
2024	~~10.5~~ 7.5%	~~0.42~~ 0%
2025	~~11.5~~ 8%	~~0.46~~ 0%
2026 ~~and each calendar year thereafter~~	~~12.5~~ 8.5%	~~0.5%~~ 0%

Table Source: “Ohio Enacts Sweeping Energy Legislation: HB 6 Bails Out Nuclear, Coal; Rolls Back Renewables and Energy Efficiency,” JDSupra

According to a 2018 report by The Brattle Group for Nuclear Matters, the retirement of Ohio’s 2 nuclear plants could add $2.43/MWh to the cost of power in Ohio. https://d3n8a8pro7vhmx.cloudfront.net/nuclearmatters/pages/313/attachments/original/1523484599/Impacts_of_Premature_Nuclear_Retirements_in_Ohio_and_Pennsylvania..pdf?1523484599

MISO – Power Prices

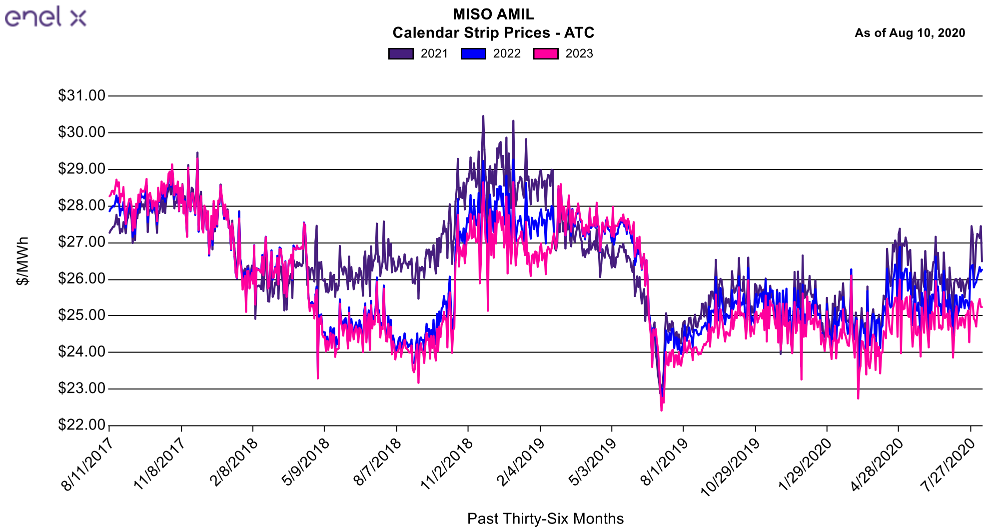
MISO AMIL forwards pull back after late-July rally

Where are forwards trending?

- CY2021 power prices returned to one year highs near $27/MWh in late-July, the third time this level has been tested since mid-April
- Forward prices are currently in backwardation, with CY2023 trading at a $1/MWh discount to CY2021
- As anticipated, increases in demand from the pandemic recovery and the onset of summer heat have pushed forward prices upward following the trend of hourly prices

Where are index prices trending?

- Intense July heat and cooling load have increased LMP prices to the highest levels this year, coming off of historic lows
- Prices averaged $27.08/MWh in July, nearly unchanged compared to a year ago



Average Monthly Day Ahead LMP - ILLINOIS HUB									
	2012	2013	2014	2015	2016	2017	2018	2019	2020
Jan	$25.54	$27.62	$51.83	$27.04	$22.84	$28.17	$34.55	$30.25	$23.52
Feb	$24.86	$23.82	$54.44	$30.18	$22.76	$24.05	$23.73	$25.80	$21.60
Mar	$24.06	$31.53	$41.18	$27.83	$22.16	$25.20	$23.66	$27.08	$19.24
Apr	$23.78	$34.30	$34.38	$25.86	$24.84	$25.51	$30.26	$25.77	$18.29
May	$27.82	$34.18	$40.86	$27.60	$25.32	$29.11	$31.36	$24.28	$19.35
Jun	$26.34	$30.04	$34.83	$25.43	$26.49	$29.01	$29.76	$22.98	$21.61
Jul	$39.78	$32.05	$31.68	$28.11	$30.91	$29.57	$30.38	$27.69	$27.08
Aug	$27.61	$30.32	$31.33	$27.30	$32.33	$26.65	$31.38	$24.35	
Sep	$23.69	$27.82	$30.96	$28.82	$29.20	$29.39	$30.65	$25.29	
Oct	$24.16	$34.52	$31.51	$27.19	$28.71	$25.53	$33.08	$23.60	
Nov	$30.73	$28.06	$34.06	$23.07	$23.71	$25.51	$34.11	$25.67	
Dec	$26.26	$31.94	$28.56	$21.80	$30.34	$25.28	$31.56	$23.40	
Avg	$27.05	$30.52	$37.13	$26.69	$26.63	$26.92	$30.37	$25.51	$21.53

Chicago – Gas Prices

Forward prices pull back from recent highs

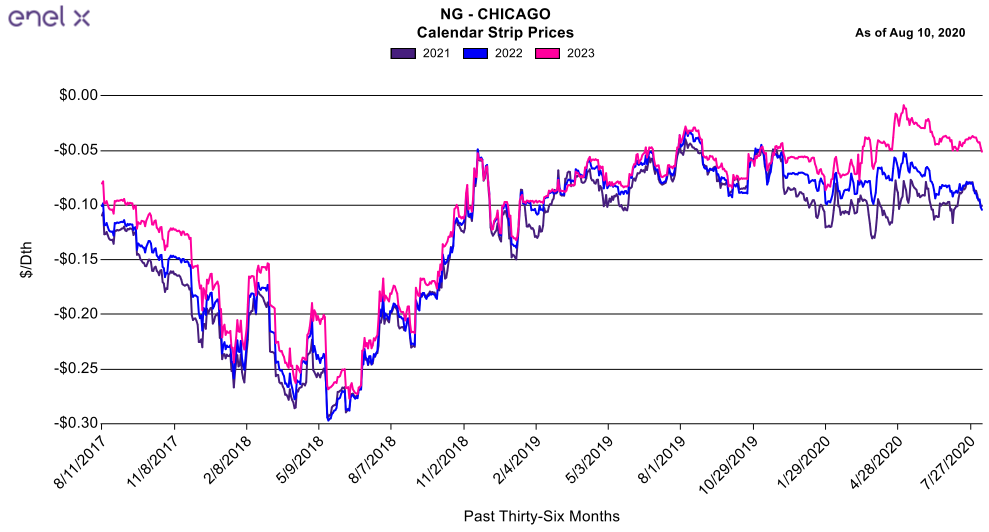
enel x

Where are forwards trending?

- Chicago basis forwards for calendar years 2021-23 continue to soften or trade sideways after reaching three-year highs in early-May
- CY2021-22 are within a couple of cents of 18-month lows
- CY2023 prices trade at a ~5 cent premium to 2021-22

Where are index prices trending?

- Chicago basis averaged $(0.02)/MMBtu in July, consistent with prices seen over the past four months
- Through the first seven months of 2020, prices averaged negative $(0.07)/MMBtu
- This summer (June & July) daily prices have averaged the narrowest discount to Henry Hub in four years



Average of Daily Prices - Chicago Basis Only

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Jan	$0.13	$0.15	$3.33	$0.05	$0.07	($0.03)	$0.07	$0.15	($0.08)
Feb	$0.13	$0.15	$6.09	$1.15	$0.03	($0.02)	($0.09)	($0.03)	($0.13)
Mar	$0.04	$0.19	$4.58	$0.10	$0.10	($0.00)	($0.17)	$0.49	($0.17)
Apr	$0.12	$0.10	$0.11	$0.01	$0.01	($0.12)	$0.01	($0.15)	($0.02)
May	$0.01	$0.08	$0.03	($0.02)	$0.01	($0.11)	($0.28)	($0.23)	($0.03)
Jun	$0.04	$0.02	$0.08	($0.05)	($0.07)	($0.14)	($0.18)	($0.23)	($0.02)
Jul	$0.06	$0.08	$0.07	$0.01	($0.06)	($0.16)	($0.12)	($0.18)	($0.02)
Aug	$0.06	$0.10	$0.05	$0.08	($0.05)	($0.06)	($0.07)	($0.18)	
Sep	$0.10	$0.09	$0.04	$0.04	($0.07)	($0.08)	($0.15)	($0.39)	
Oct	$0.18	$0.12	$0.05	$0.06	($0.07)	($0.09)	($0.02)	($0.29)	
Nov	$0.21	$0.10	$0.30	$0.07	($0.05)	($0.01)	($0.00)	($0.09)	
Dec	$0.09	$0.44	$0.10	$0.08	$0.06	$0.08	($0.18)	($0.10)	
Avg	**$0.10**	**$0.14**	**$1.24**	**$0.13**	**($0.01)**	**($0.06)**	**($0.10)**	**($0.10)**	**($0.07)**

California

August 2020

< back to beginning

Insight of the Month

The Electrification of California Experiences Pushback from Gas Utilities

- Last year the City of Berkley California made headlines by becoming the first city in the U.S. to ban the inclusion of new natural gas infrastructure in both residential and non-residential buildings. As of July 24, 32 cities in the State have committed to restrictions on new natural gas hookups in upcoming building projects.
  > Source: "California's Cities Lead the Way to a Gas-Free Future," By Sierra Club

- 2020 marked the beginning of California's solar mandate which required newly constructed homes to have solar systems installed. While the new building code was weakened by Sacramento Municipal Utility District getting approval to instead allow homes to offset usage through community solar agreements, the requirement provided significant reinforcement to the electrification movement in the State.
  > Source: "California Solar Mandate Weakened by Commission's new definition of community solar," By PV Magazine

- The electrification movement in California has faced pushback from industry organizations. In July, SoCal Gas filed a lawsuit against the California Energy Commission (CEC) for failure to complete its requirements under Assembly Bill (AB) 1257, a law passed in 2013 that requires the CEC to "identify strategies to maximize the benefits obtained from natural gas," every four years. SoCal Gas is pushing back due to lack of support from the CEC, contending that the Commission's only recognition of the resource is in regards to phasing it out in electrification measures.
  > Source: "California sued over climate change policy – by the nation's biggest gas utility", By Los Angeles Times

KEY TAKEAWAY: California's clean energy goals have enabled regulators to enact sweeping electrification mandates that no longer cite natural gas a bridge resource to meet energy goals. As a result the government is beginning to see significant pushback from companies and industry groups. Now the courts will be forced to decide the legality of methods so far implemented for total electrification in the State.

Northern CA - Power Prices

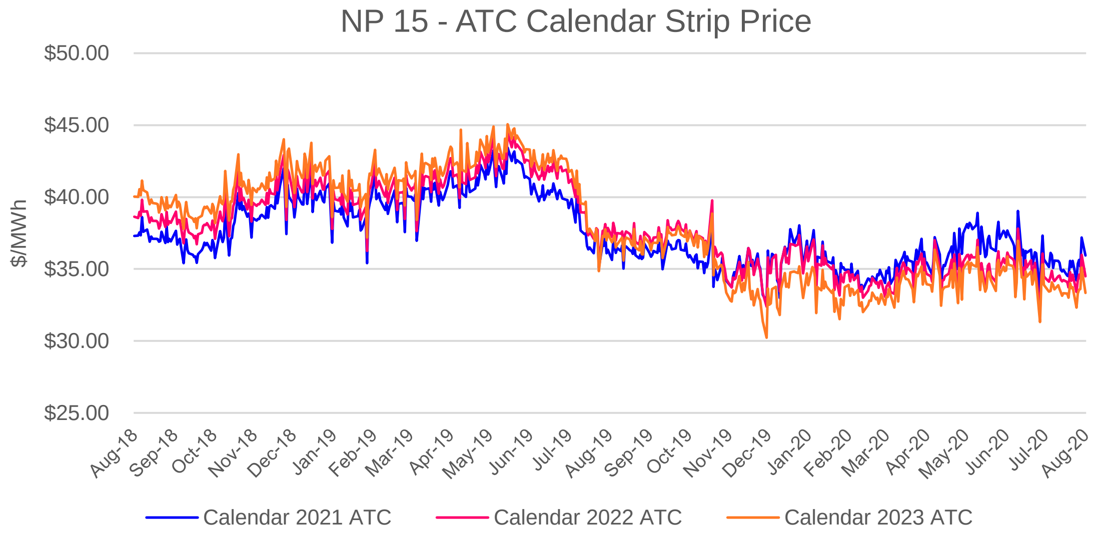
Depressed demand outlook holds forward prices level in July

Where are forwards trending?

- NP-15 forward power prices were slightly down through the month of July, averaging roughly a decline less than 1% across 2021-23 calendar year strip prices
- For most of the month prices pushed towards $34/MWh and despite a brief rebound in the last week, calendar year 2022 strip prices are down 1.5% year-to-date
- Decreased demand for gas and oil due to COVID-19 forcing the shut down of operations has caused backwardation, with 2021 trading nearly 5% below 2023

Where are index prices trending?

- Average DA monthly prices at NP-15 continued to climb from May's record low to average $25.70/MWh in July. The $2/MWh increase was largely due rising summer temperatures escalating cooling demand
- Continued workplace restrictions due to Covid-19 in addition to depressed national gas prices will likely keep spot prices below the seasonal average



Average Daily Price - NP 15									
	2012	2013	2014	2015	2016	2017	2018	2019	2020
Jan	$ 27.09	$ 37.35	$ 46.07	$ 33.40	$ 28.54	$ 34.90	$ 32.94	$ 41.09	$ 31.19
Feb	$ 25.27	$ 37.50	$ 61.99	$ 30.71	$ 24.01	$ 29.23	$ 30.47	$ 75.58	$ 26.34
Mar	$ 21.80	$ 40.19	$ 47.63	$ 30.72	$ 19.60	$ 22.12	$ 30.06	$ 36.63	$ 26.58
Apr	$ 20.21	$ 41.96	$ 47.48	$ 32.27	$ 21.23	$ 22.13	$ 24.91	$ 22.25	$ 21.61
May	$ 23.39	$ 38.42	$ 46.67	$ 32.69	$ 20.76	$ 29.28	$ 20.75	$ 18.46	$ 18.43
Jun	$ 25.37	$ 39.80	$ 45.42	$ 34.64	$ 28.09	$ 33.12	$ 28.14	$ 22.94	$ 23.49
Jul	$ 26.79	$ 42.65	$ 47.23	$ 35.54	$ 32.80	$ 35.84	$ 54.89	$ 30.28	$ 25.70
Aug	$ 35.24	$ 39.43	$ 46.49	$ 34.32	$ 34.85	$ 45.20	$ 49.84	$ 31.82	
Sep	$ 31.01	$ 40.76	$ 45.45	$ 34.46	$ 34.66	$ 39.72	$ 33.42	$ 34.55	
Oct	$ 36.25	$ 38.75	$ 44.73	$ 32.49	$ 34.03	$ 41.19	$ 43.74	$ 36.32	
Nov	$ 34.86	$ 40.74	$ 45.12	$ 29.41	$ 30.17	$ 36.27	$ 52.40	$ 41.51	
Dec	$ 32.38	$ 49.41	$ 37.52	$ 28.65	$ 36.60	$ 34.22	$ 54.17	$ 39.82	
Avg	**$ 28.30**	**$ 40.58**	**$ 46.81**	**$ 32.44**	**$ 28.78**	**$ 33.60**	**$ 37.98**	**$ 35.94**	**$ 24.76**

Southern CA - Power Prices

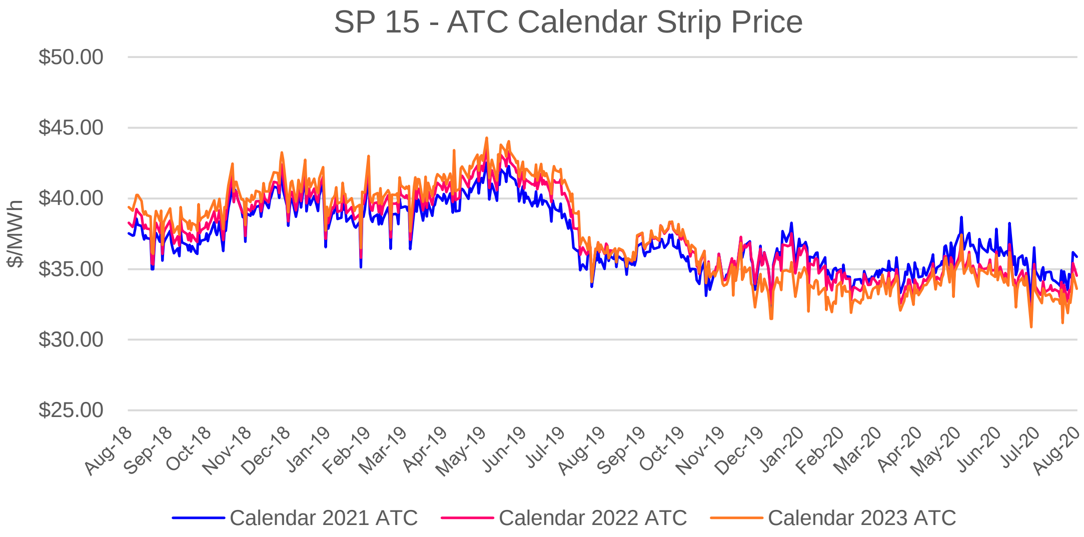
SP-15 Spot Prices Average Decade-Low Prices for Month of July

Where are forwards trending?

- In July, SP-15 forwards averaged $1/MWh lower month-over-month, but entered August roughly unchanged. SP-15 CY2021 strip prices settled at $35/MWh on August 4, down 2.5% year-to-date
- Decreased demand for gas and oil due to COVID-19 forcing the shut down of operations has caused backwardation, with CY2021 trading nearly 5% below CY2023

Where are index prices trending?

- Average DA monthly prices increased to $27.99/MWh in July, which is 11% lower than this time last year and 35% lower than the 5 year average
- This summer (June & July) spot prices have averaged the lowest over the past decade
- If increases in demand are reversed by the return of COVID-19 restrictions due to a second wave, spot prices will likely see a decline



Average Daily Price - SP 15

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Jan	$ 26.08	$ 42.88	$ 46.47	$ 33.51	$ 28.18	$ 33.55	$ 34.37	$ 39.96	$ 31.22
Feb	$ 25.58	$ 42.75	$ 61.70	$ 30.05	$ 22.99	$ 26.39	$ 34.24	$ 70.89	$ 25.67
Mar	$ 22.59	$ 46.44	$ 47.60	$ 29.00	$ 18.05	$ 21.75	$ 30.53	$ 36.02	$ 24.99
Apr	$ 25.16	$ 49.05	$ 44.71	$ 27.93	$ 18.44	$ 24.80	$ 24.88	$ 23.52	$ 18.53
May	$ 26.64	$ 43.69	$ 45.85	$ 27.21	$ 21.01	$ 28.35	$ 21.65	$ 18.43	$ 17.26
Jun	$ 26.07	$ 42.14	$ 45.25	$ 33.94	$ 29.95	$ 32.80	$ 28.17	$ 23.07	$ 22.20
Jul	$ 29.67	$ 43.85	$ 47.75	$ 36.02	$ 34.29	$ 36.70	$ 75.43	$ 31.52	$ 27.99
Aug	$ 36.61	$ 41.25	$ 45.89	$ 35.69	$ 34.93	$ 45.35	$ 69.73	$ 32.84	
Sep	$ 35.90	$ 43.42	$ 46.65	$ 34.76	$ 32.89	$ 38.43	$ 35.33	$ 36.08	
Oct	$ 37.76	$ 39.97	$ 45.17	$ 32.62	$ 33.06	$ 41.09	$ 38.88	$ 34.36	
Nov	$ 35.55	$ 40.64	$ 44.98	$ 28.86	$ 27.79	$ 39.51	$ 51.59	$ 42.03	
Dec	$ 34.30	$ 48.58	$ 37.87	$ 28.09	$ 33.95	$ 39.12	$ 52.93	$ 40.24	
Avg	**$ 30.16**	**$ 43.72**	**$ 46.66**	**$ 31.47**	**$ 27.96**	**$ 33.99**	**$ 41.48**	**$ 35.75**	**$ 23.98**

California – Gas Prices

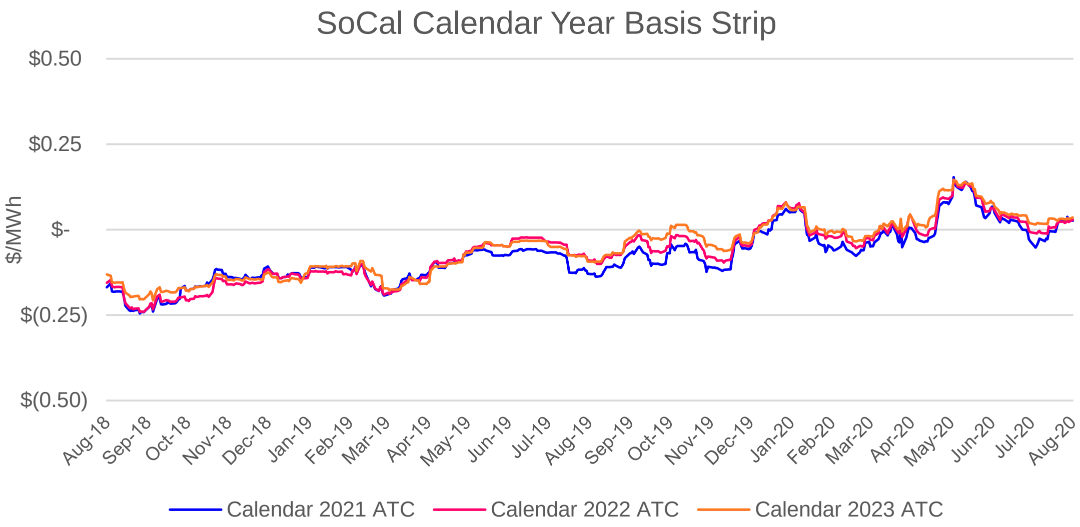
SoCal Forward Basis Strip Price Stays Positive in July

Where are forwards trending?

- The SoCal Basis Calendar Year 2021 strip price ended the month of July at $0.03/MMBtu after spending most of the month trading in the negative
- While CY2021 strip prices are down 47% year-to-date they are significantly higher than the 3 year average (-$0.08/MMBtu)
- Future contract months in the near term have been largely influenced by pipeline outages in the region which are expected to persist into late 2020

Where are index prices trending?

- PG&E daily basis prices averaged $0.52/MMBtu in July, representing about a ~45% decline M-o-M and are more than double this time last year



Average Daily Price - PG&E City Gate Basis Only				
	2017	2018	2019	2020
Jan	$0.30	($0.76)	$0.61	$0.95
Feb	$0.44	$0.05	$4.88	$0.76
Mar	$0.30	$0.06	$1.12	$0.80
Apr	$0.23	($0.08)	$0.63	$0.64
May	$0.25	$0.10	$0.65	$0.83
Jun	$0.19	$0.07	$0.18	$0.93
Jul	$0.27	$0.20	$0.24	$0.52
Aug	$0.40	$0.40	$0.44	
Sep	$0.34	$0.17	$0.51	
Oct	$0.26	$0.50	$0.92	
Nov	$0.14	$0.94	$0.76	
Dec	$0.16	$1.09	$1.19	

Average Daily Price - SoCal Basis Only				
	2017	2018	2019	2020
Jan	$0.02	($0.60)	$0.45	$0.26
Feb	($0.11)	($0.19)	$4.11	($0.01)
Mar	($0.22)	($0.41)	$0.34	($0.21)
Apr	($0.27)	($0.66)	($0.61)	($0.30)
May	($0.28)	($0.80)	($0.82)	($0.06)
Jun	($0.17)	($0.47)	($0.58)	$0.15
Jul	($0.17)	$1.15	$0.05	($0.19)
Aug	$0.02	$0.89	$0.23	
Sep	($0.16)	($0.56)	$0.14	
Oct	($0.11)	($0.29)	$0.21	
Nov	($0.11)	$0.12	$0.11	
Dec	$0.27	$0.93	$0.79	

Texas

August 2020

< back to beginning

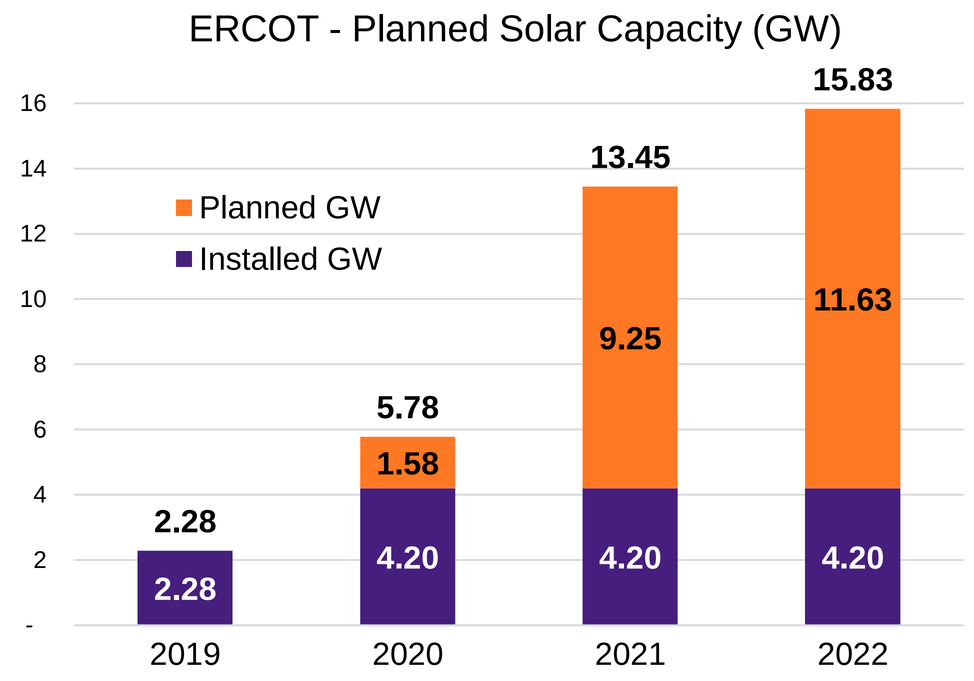
Insight of the Month

ERCOT solar capacity doubles in 2020, July real time prices down by 45%

- ERCOT nearly doubled its solar fleet to 4.2 GW since December 2019
- With additional 1.6 GW generation in queue, it is all set to expand its solar capacity to 5.8 GW by the end of 2020. It is further slated to increase up to 15.8 GW by 2022

Pricing Impacts:

- Solar, with highest output during peak hours, is playing a key role in keeping average real time electricity prices low this summer alongside increased wind
- LMP prices are down almost 45% compared to 2019
  - North Hub real-time on-peak July 2019: **$42.17/MWh**
  - North Hub real-time on-peak July 2020: **$23.31/MWh**



Source: Capacity_Changes_by_Fuel_Type_Charts_June_2020

KEY TAKEAWAY: In June 2019, solar supplied 1.2% of ERCOT's overall generation but by June 2020, as its capacity doubled, solar supplied 2.9%. Considering its low cost and with ERCOT being an energy-only market, where generators are paid for electricity produced rather than capacity offered, solar is expected to continue to displace coal-fired generation

ERCOT – Power Price Update

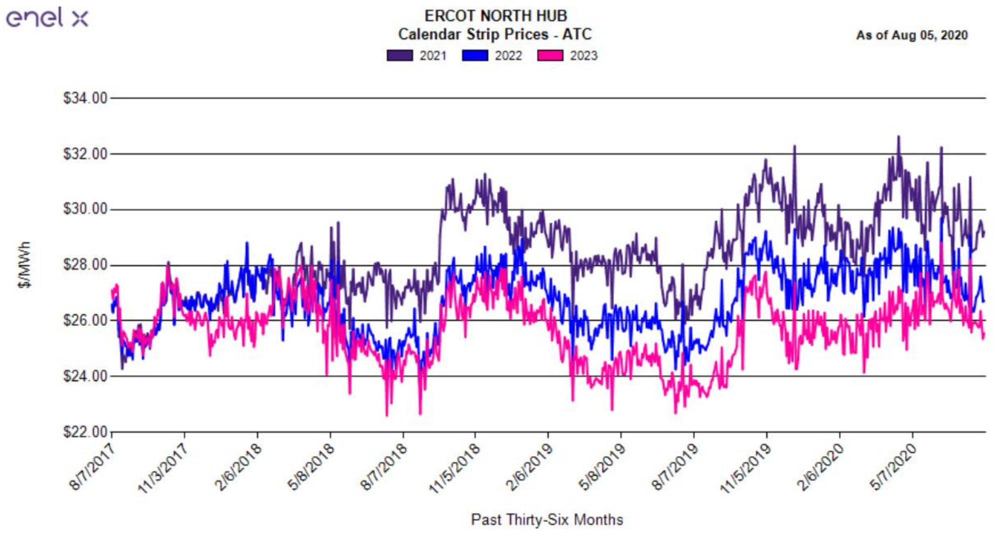
CY 2023 contract offers $3/MWh discount compared to CY 2021

Where are forwards trending?

- CY2021 – 23 continued its downward trend in July, falling on average for the third consecutive month
- The delta between CY2021 and CY2023 continues to average $3/MWh, **presenting a unique opportunity for budget conscious and risk averse customers to lock in a longer term contract**

Where are index prices trending?

- Day-Ahead prices averaged $22.7/MWh in July, up 15% month over month
- ERCOT experienced spot price volatility last summer on sustained heat and low wind. This pattern could reemerge later in August if temps are above average and wind output is low



Average Monthly Day Ahead LMP - North Hub									
	2012	2013	2014	2015	2016	2017	2018	2019	2020
Jan	$22.91	$26.19	$36.71	$25.00	$19.13	$22.99	$37.59	$24.32	$16.96
Feb	$21.45	$25.12	$51.30	$23.93	$15.29	$19.45	$21.77	$20.86	$17.72
Mar	$23.31	$30.73	$49.91	$26.24	$16.86	$21.23	$22.61	$28.10	$23.34
Apr	$27.42	$33.81	$40.29	$23.62	$18.35	$21.41	$23.52	$22.99	$19.91
May	$23.59	$33.05	$35.77	$23.79	$17.91	$23.42	$35.31	$23.98	$18.23
Jun	$32.53	$34.96	$39.73	$24.32	$23.16	$25.89	$30.21	$25.18	$18.92
Jul	$29.94	$33.06	$36.02	$29.46	$26.80	$30.65	$78.97	$29.78	$22.70
Aug	$39.22	$35.84	$39.33	$45.30	$29.83	$26.83	$31.60	$126.52	
Sep	$27.64	$33.44	$33.87	$24.58	$26.25	$23.35	$27.30	$79.88	
Oct	$27.75	$29.73	$34.69	$20.82	$24.01	$21.41	$30.03	$28.00	
Nov	$29.24	$30.46	$34.53	$19.20	$18.66	$21.58	$31.22	$23.62	
Dec	$25.81	$35.42	$26.57	$17.44	$25.15	$20.95	$30.40	$18.73	
Avg	$27.57	$31.82	$38.23	$25.31	$21.78	$23.26	$33.38	$37.66	$19.68

ERCOT – Gas Price Update

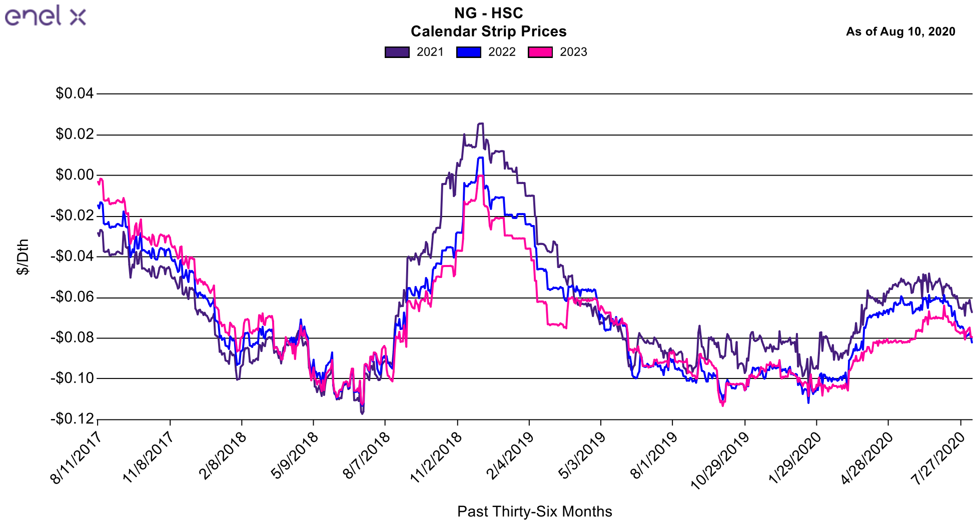
Houston Ship Channel (HSC) Basis down by 10%, first time in last 3 months

Where are forwards trending?

- After a brief rally in the second quarter of 2020, HSC basis for CY 2021-23 trended downwards in July
- Basis fell by 10% on an average since June and were last seen to be trading between $(0.06) - $(0.08)/Dth

Where are index prices trending?

- HSC daily prices averaged $0/MMBtu in July, which means that prices traded at parity with Henry Hub



Average of Daily Prices - Houston Ship Channel Basis Only									
	2012	2013	2014	2015	2016	2017	2018	2019	2020
Jan	($0.02)	($0.06)	($0.08)	($0.07)	($0.06)	($0.10)	$0.35	($0.06)	($0.09)
Feb	($0.07)	($0.06)	$0.21	($0.15)	($0.08)	($0.03)	($0.02)	$0.00	($0.06)
Mar	($0.06)	($0.04)	($0.02)	($0.11)	($0.01)	$0.04	$0.03	($0.01)	($0.10)
Apr	($0.06)	($0.02)	($0.03)	($0.02)	($0.03)	$0.04	$0.07	($0.04)	($0.08)
May	($0.05)	$0.02	($0.10)	($0.03)	($0.04)	$0.11	$0.04	($0.06)	($0.05)
Jun	$0.00	($0.04)	$0.04	($0.05)	($0.07)	$0.12	$0.07	($0.04)	($0.00)
Jul	($0.03)	($0.01)	$0.01	($0.00)	($0.08)	$0.01	$0.09	($0.06)	$0.00
Aug	($0.00)	($0.01)	$0.06	($0.03)	($0.05)	($0.01)	$0.08	($0.07)	
Sep	($0.01)	$0.02	$0.02	($0.03)	($0.03)	($0.01)	$0.04	($0.07)	
Oct	($0.08)	($0.04)	($0.06)	$0.02	$0.15	$0.05	$0.25	($0.05)	
Nov	($0.06)	($0.07)	($0.07)	($0.02)	$0.00	($0.04)	$0.05	($0.14)	
Dec	($0.04)	$0.09	($0.12)	$0.06	($0.09)	($0.00)	($0.01)	($0.11)	
Avg	($0.04)	($0.02)	($0.01)	($0.04)	($0.03)	$0.01	$0.09	($0.06)	($0.06)

Mexico

August 2020

< back to beginning

Insights of the Month, Part 1

CRE eliminates regulation to Pemex in natural gas prices

- The Energy Regulatory Commission (CRE) approved the elimination of the asymmetric regulation of Pemex[1] natural gas prices.
- The previous mandate required Pemex and its subsidiaries to publish VPM[2] (first-hand sale) prices for natural gas, with the objective of limiting the dominant power of Pemex and allowing greater participation to other companies to promote the efficient and competitive development of the market.
- In turn, it was established that Pemex would set the sale price first hand through a competitive criterion to limit its market power in the country to gradually generate an open market.
- With this resolution issued by CRE, Pemex will no longer be required to provide transparency on natural gas prices, which is expected to bolster the company's position in the market and over time reduce competition in Mexico.
- Due to the company's lack of supply capacity, SISTRANGAS (Mexico's Integrated National Natural Gas Transportation and Storage System) is being affected, which could translate into physical or economic damage (penalties for imbalance) to current customers

---

[1] Petróleos Mexicanos (known as Pemex) is the utility company responsible for the exploration, production, refining and marketing of hydrocarbons.

[2] VPM (known by its initials in Spanish) is, in English, first-hand sale. Price issued by Pemex using the methodology authorized by the Energy Regulatory Commission (CRE), National Hydrocarbon Commission (CNH) and Pemex.

Insights of the Month, Part 2

CFE committed to carbon generation

- At the end of 2018, Manuel Bartlett, the director of the CFE (in English: the Federal Electricity Commission) announced that he planned to invest ~10.42 billion pesos to modernize the utility's coal plants
- That plan is already underway, underscored by the state-owned company's recent purchase of 2 million tons of coal, equivalent to 2 billion pesos
- According to the CFE, the use of coal-fired power plants has decreased in recent years due to compliance with the rules of the Wholesale Electricity Market that establish priority should be given to the dispatch of plants with the lowest variable costs. Bartlett is seeking an increase in its generation to provide reliability to the system
- For this, CFE agreed with the National Center for Energy Control (CENACE) to increase the level of dispatch of CFE's three coal power plants

KEY TAKEAWAY: With this measure, CFE will fail to comply with the reduction of CO_2 emissions targeted for 2023. Electric tariffs should increase as a result of the entry into operation of less efficient technologies.

Monthly CFE Rates

CFE Rates decrease in August, both M-o-M & Y-o-Y

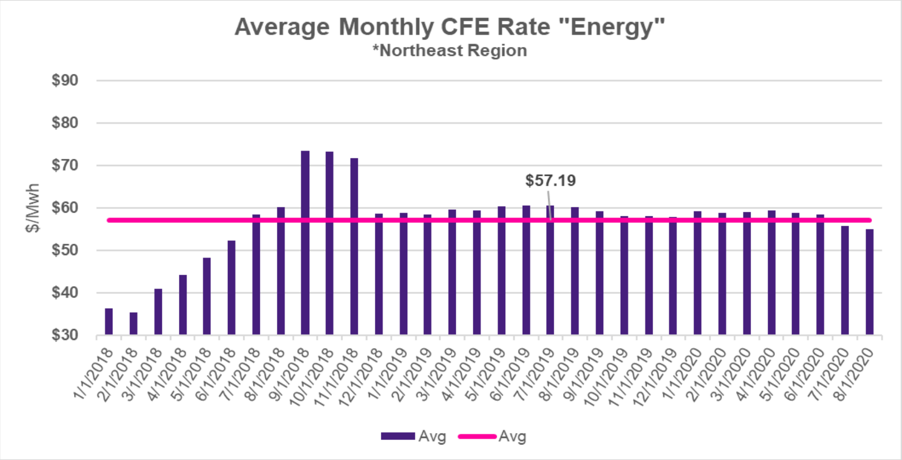
Where are index prices trending?

- Monthly GDMTH[1] energy prices fell ~1.3% M-o-M and ~8.7% Y-o-Y in the Northeast[2] región.
- CFE increased its level of collection at the end of Q2, as a result of the decrease in consumption and non-payment of customers, therefore it has had to make service cuts, resulting in charges for reconnection, which have had a significant impact on the revenue of the Utility Company

Where are capacity prices trending?

- Monthly GDMTH capacity prices declined ~1.52% M-o-M and ~7.51% Y-o-Y in the West[3] region.

KEY TAKEAWAY: For Q3-Q4, an increase in CFE rates is expected due to recent measures to include coal-fired power plants as the main dispatch source, as well as the change in Pemex's VPM pricing formula.



Average Monthly CFE GDMTH Capacity- West* USD/MW						
	2018		2019		2020	
Jan	$	8,434	$	15,643	$	15,689
Feb	$	8,902	$	15,537	$	15,571
Mar	$	10,227	$	15,841	$	15,672
Apr	$	11,246	$	15,784	$	15,772
May	$	12,481	$	16,094	$	15,601
Jun	$	13,727	$	16,156	$	15,452
Jul	$	15,644	$	16,189	$	15,084
Aug	$	17,803	$	16,061	$	14,855
Sep	$	20,212	$	15,716		
Oct	$	20,165	$	15,379		
Nov	$	19,714	$	15,363		
Dec	$	15,676	$	15,357		
Avg	**$**	**14,519**	**$**	**15,760**	**$**	**15,462**

**CFE prices are issued in MXN/kWh, for publication terms it is presented in USD/MWh for which an average annual exchange rate of $22 MXN is used. This can change monthly.*

---

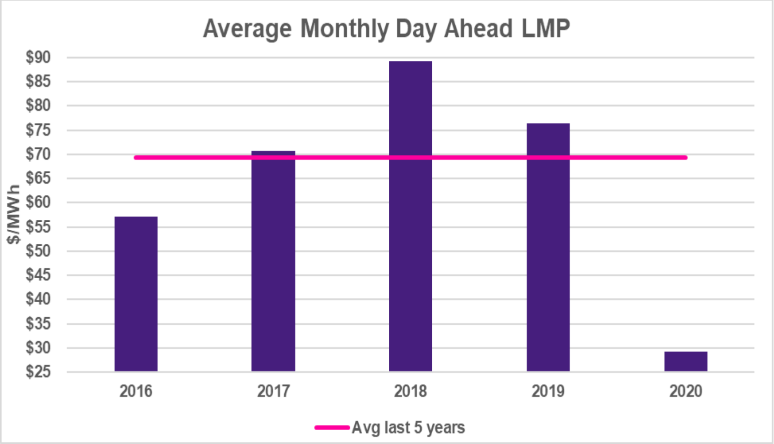
[1] GDMTH: Rate classification most used in medium voltage.
[2] The Northeast region includes the states of Nuevo Leon and Tamaulipas.
[3] The West region includes the states of Nayarit, Jalisco, Zacatecas, Aguascalientes, Colima, Michoacan, San Luis Potosí, Queretaro

Average Monthly Day Ahead LMP

Prices rebound in June on seasonal trends

Where are index prices trending?

- Day Ahead LMPs averaged $28.19/MWh in June, which is 26% higher M-o-M due to seasonal demand.
- During the first half of 2020, LMPs averaged $29.19/MWh, down 57% compared to the same period the year before when prices averaged $ 82.55/MWh.
- The rise in natural gas prices, seasonal adjustments in consumption have led to a price increase



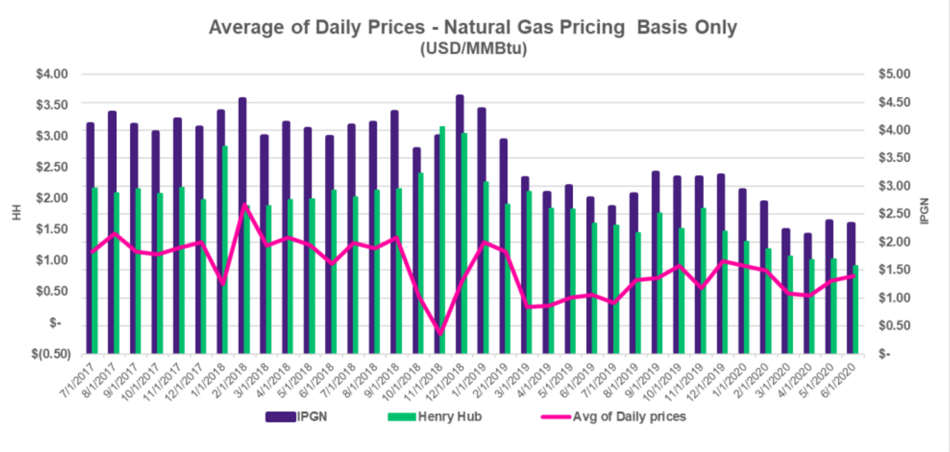
Average Monthly Day Ahead LMP USD/MWh					
	2016	2017	2018	2019	2020
Jan		$ 46.36	$ 60.47	$ 61.59	$ 29.62
Feb		$ 47.03	$ 67.99	$ 78.43	$ 31.70
Mar		$ 53.59	$ 64.59	$ 81.47	$ 27.04
Apr		$ 72.16	$ 78.05	$ 92.96	$ 21.69
May	$ 56.49	$ 77.63	$ 108.53	$ 96.22	$ 28.85
Jun	$ 64.42	$ 103.41	$ 116.31	$ 84.62	$ 36.24
Jul	$ 68.73	$ 76.93	$ 125.08	$ 83.11	
Aug	$ 58.22	$ 91.57	$ 137.61	$ 92.77	
Sep	$ 63.43	$ 73.22	$ 103.18	$ 87.93	
Oct	$ 63.24	$ 74.94	$ 78.63	$ 66.80	
Nov	$ 40.17	$ 74.19	$ 69.15	$ 54.97	
Dec	$ 42.90	$ 58.09	$ 60.69	$ 36.12	
Avg	$57.20	$70.76	$89.19	$76.42	$ 29.19

Natural Gas Price Index (IPGN)1

Where are index prices trending?

- NGPI daily prices averaged \$0.76/MMBtu in June – up ~1% M-o-M and ~70% Y-o-Y
- For June, the differential between the NGPI and Inside FERC Henry Hub Index have averaged \$0.69/MMBtu – highest levels to 2019
- The monthly increase in the price of natural gas is the result of the current emergency situation presented in the SISTRANGAS (national piping system) and the lack of supply by the state producer company due to seasonality

[1] *IPGN (an acronym based on the Spanish term) is an informative index, which reflects the average of the prices of the transactions carried out freely and voluntarily by the participants in the Mexican market.*



Average of Daily Prices - Natural Gas Pricing Basis Only (in USD/Mmbtu)				
	2017	**2018**	**2019**	**2020**
Jan		\$0.63	\$1.30	\$0.91
Feb		\$1.90	\$1.15	\$0.84
Mar		\$1.24	\$0.25	\$0.47
Apr		\$1.37	\$0.28	\$0.44
May		\$1.25	\$0.41	\$0.68
Jun		\$0.96	\$0.45	\$0.76
Jul	\$1.15	\$1.29	\$0.32	
Aug	\$1.44	\$1.20	\$0.68	
Sep	\$1.14	\$1.37	\$0.73	
Oct	\$1.10	\$0.43	\$0.92	
Nov	\$1.21	(\$0.18)	\$0.55	
Dec	\$1.29	\$0.67	\$1.00	
Avg	**\$1.22**	**\$1.01**	**\$0.67**	**\$0.69**