

## PUBLIC STATEMENTS & REMARKS

### Statement of Commissioner Dan M. Berkovitz on Recent Trading in the WTI Futures Contract before the Energy and Environmental Markets Advisory Committee Meeting

May 7, 2020

#### Summary

*On April 20th, the price of the West Texas Intermediate (“WTI”) crude oil futures contract for May delivery collapsed from about \$18 per barrel to negative \$37 per barrel, a fall of \$55 per barrel in one trading session. During this abrupt drop, the price of the May futures contract diverged from the price of crude oil in the physical market, just when the prices in the futures and physical markets should have been converging. The CFTC must determine the causes of this unprecedented price movement and divergence from physical markets. The Commission should work with the Chicago Mercantile Exchange (“CME”) to ensure that trading in upcoming WTI expirations is orderly, supports convergence, and reflects supply and demand in the physical market, while maintaining sufficient liquidity for commercial market participants. If convergence issues persist, the CFTC’s Energy and Environmental Markets Advisory Committee (“EEMAC”) can play an important role in advising the Commission on how to achieve these objectives.*

#### WTI Price Collapse and Divergence

On April 20th, the day prior to the last day of trading and expiration of the May futures contract for WTI, the price of the May futures contract fell from \$17.73 per barrel at the market open to a closing settlement price of negative \$37.63 per barrel. In the last 20 minutes of trading, buying was scarce as the price dropped approximately \$40 per barrel. As a result of this unprecedented collapse,[1] the price of the May crude oil futures contract became disconnected from the price of crude oil in the physical market and other derivative instruments.[2]

The WTI contract is a key benchmark in the energy and financial markets. Businesses use the contract to manage their risks arising from energy prices. The contract also is used by financial market participants to manage inflationary and other risks correlated to energy prices. The extreme divergence between the price of the WTI futures contract and prices in the physical market particularly affected holders of various crude oil options, WTI mini-futures contracts, and the Trading-at-Settlement (“TAS”)[3] trades that settled on the penultimate day of trading.[4]

#### CFTC Must Determine the Causes of the Divergence

A futures contract that is disconnected from the physical market cannot effectively serve to discover prices or manage price risks arising from the use of the commodity. To fulfill its intended purpose and meet the requirements for futures contracts in the Commodity Exchange Act (“CEA”) and the Commission’s regulations, a futures contract must be able to perform as intended under all market conditions. It is precisely in times of severe market stress or unusual market conditions—such as are now present in the oil market—that market participants most need the futures market to serve as an effective mechanism for price discovery and risk management.

The CFTC is analyzing the divergence and extraordinary price movements on the penultimate trading day in WTI. A variety of explanations have been proffered in news reports and blogs for the precipitous price plunge. We must carefully examine the trading data and market participant activities on and around April 20th. A critical question that both the Commission and the CME must answer is the extent to which trading in WTI on that date resulted from unique circumstances or actions, or reflects structural issues with the contract that may persist or recur in the future.

## **Underlying Crude Oil Market Conditions**

The extraordinary conditions in the crude oil market that developed throughout March and April 2020 set the stage for the extreme price movement into negative territory on the penultimate day of trading in the May futures contract.

### *Supply/Demand Imbalance*

The May WTI futures contract traded during a period of extraordinary imbalance between supply and demand in the physical crude oil market. The global economic slowdown caused by the COVID-19 pandemic resulted in a steep decline in demand for crude oil and an excess of supply. The International Energy Agency estimated that global oil demand this April would be 29 million barrels per day less than the previous April. On the other hand, the supply reduction in May was expected to be only on the order of 12 million barrels per day.<sup>[5]</sup> The excess supply and the contango structure of the futures market have led to a filling of existing storage capacity, both in tanks and in floating storage.<sup>[6]</sup>

### *Limited Storage at Cushing, Oklahoma*

Cushing, Oklahoma is a major oil pipeline and storage hub that also serves as the location for delivery on WTI futures contracts held through expiration. According to the EIA, “[c]rude oil storage facilities at Cushing have 76 million barrels of working storage capacity, of which 60 million barrels (76% after accounting for pipeline fill and stocks in transit) were filled as of April 17.”<sup>[7]</sup> Press reports indicate that all of the unfilled capacity is leased.<sup>[8]</sup>

According to the EIA, the “extreme market events” just prior to the expiration of the May WTI futures contract were caused by a variety of factors, including “the inability of contract holders to find other market participants to sell the futures contracts,” and the “scarcity and high cost of available crude oil storage,” which forced market participants who were unable to take delivery to pay counterparties to take their contract—in essence, negative prices.<sup>[9]</sup>

There is a high probability that the supply, demand, and storage conditions that were present during trading in the May spot month will persist through the upcoming weeks and into the spot month for the June WTI futures contract.

## **CFTC and CME Should Take Appropriate Action if Necessary**

The CFTC and the CME have the authority and the responsibility to ensure that trading in the WTI futures contract remains orderly and reflects the forces of supply and demand.<sup>[10]</sup> The CFTC and the CME should continue working to analyze the causes of the divergence in the May contract. Based upon that analysis, CME and the CFTC should take whatever measures may be appropriate to ensure that trading in the WTI futures contract is orderly and supports convergence of the futures and physical markets. In considering any such measures, the CFTC and CME should seek to ensure contract integrity and protect the price discovery process, while maintaining sufficient liquidity for commercial market participants.

A full understanding of the contract’s behavior during the May spot month may provide valuable information about the effectiveness of a variety of CFTC regulations. For example, an analysis of trading positions and market liquidity leading up to and during the expiration may inform the Commission on the effectiveness of the current and proposed position limits and accountability levels for crude oil futures contracts. Similarly, the effect of exchange-traded funds and other passive commodity investment vehicles on the term structure of and liquidity in the crude oil market can be assessed. The Commission should make public the results of any such analyses in a manner consistent with the requirements of the CEA.

## **Role of the EEMAC**

In the event that convergence issues recur during the expiration of the June contract, or in subsequent contracts, the EEMAC can perform a beneficial role in advising the Commission on what measures may be appropriate. There is precedent for a Commission advisory committee to perform such a role: the Commission's Agricultural Advisory Committee advised the Commission on measures to address the lack of convergence in the Chicago Board of Trade's wheat contract.<sup>[11]</sup> Any such activity of the EEMAC would not be a substitute for, or conflict or interfere with, the responsibility of the CFTC and CME to ensure orderly trading in the contract. The EEMAC would instead supplement those primary efforts.

I urge the members of the Committee to consider how the Committee can constructively address these issues under such circumstances. I look forward to further discussions with the Committee on this important matter for the Commission and our energy markets.

-CFTC-

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[1] "The median intra-day range on the last three days [of trading of the WTI futures contract] is \$1.6, the mean is \$1.5, and the standard deviation is \$1.47. So we are around a 40 standard deviation event here." The spread between the May and June contracts widened to a "megacontango" of just over \$58 per barrel. Craig Pirrong, Streetwise Professor (Apr. 20, 2020), available at <https://streetwiseprofessor.com/>; see also Bloomberg News, *The 20 Minutes that Broke the U.S. Oil Market* (Apr. 25, 2020) available at <https://www.bloomberg.com/news/articles/2020-04-25/the-20-minutes-that-broke-the-u-s-oil-market?sref=DzeLiNol>.

[2] The Department of Energy's Energy Information Administration ("EIA") reports that the negative pricing was "mainly confined to the [WTI futures] market." EIA, Low liquidity and limited available storage pushed WTI crude oil futures below zero (Apr. 27, 2020), available at <https://www.eia.gov/todayinenergy/detail.php?id=43495>; see also Izabella Kaminska, *Unprecedented oil commentary*, FT Alphaville (Apr. 21, 2020), available at <https://ftalphaville.ft.com/2020/04/21/1587456826000/Unprecedented-oil-commentary/>. ("[I]t's not true to say that oil prices are currently negative in terms of the broader market. . . . [T]he negative pricing is very specific to the WTI contract."); Kenneth B. Medlock III, *April 20: WTI At -\$37, Brent At \$26! What Happened? What Comes Next? The Stories That Will Be Told . . . ,* Forbes (Apr. 21, 2020), available at <https://www.forbes.com/sites/thebakernstitute/2020/04/21/april-20-wti-at37-brent-at-26-what-happened-what-comes-next-the-stories-that-will-be-told/#34d2fd3b4d4b>.

[3] A TAS order allows a trader to execute, at any time during the trading session, a transaction at a spread to the settlement price. CME Group, Trading at Settlement (TAS), available at: <https://www.cmegroup.com/trading/trading-at-settlement.html>.

[4] On the last day of trading in the May futures contract, the price of the May contract rebounded to a final settlement price of \$13.86.

[5] International Energy Agency, Oil Market Report—April 2020, available at <https://www.iea.org/reports/oil-market-report-april-2020>. Several recent reports indicate that demand destruction in the U.S. may be greater than originally projected. See, e.g., Collin Eaton, *Small Oil Drillers are Turning Off Taps More Quickly Than Anticipated*, Wall Street Journal (Apr. 30, 2020), available at [https://www.wsj.com/articles/small-oil-drillers-are-turning-off-taps-more-quickly-than-anticipated-11588251194?mod=itp\\_wsj&ru=yahoo&mg=prod/com-wsj](https://www.wsj.com/articles/small-oil-drillers-are-turning-off-taps-more-quickly-than-anticipated-11588251194?mod=itp_wsj&ru=yahoo&mg=prod/com-wsj); David Sheppard and Neil Hume, *Oil traders turn to salt caves and train cars in storage crisis*, Financial Times (May 1, 2020), available at [https://www.ft.com/content/257cb8b1-5b2a-475c-b722-04488664b43e?desktop=true&segmentId=dd5c99e9-30be-ddd0-c634-ff3a0c2b738f#myft:notification:daily\\_email:content](https://www.ft.com/content/257cb8b1-5b2a-475c-b722-04488664b43e?desktop=true&segmentId=dd5c99e9-30be-ddd0-c634-ff3a0c2b738f#myft:notification:daily_email:content).

[6] A contango price structure is where the future price of a commodity is higher than the current or spot price. When the future price is greater than the current price by more than it would cost to store the commodity until that future point in time, a person can profitably purchase the commodity today, place it in storage, and then sell it later for a higher price. Contango thus incentivizes storage.

[7] EIA, This Week in Petroleum (Apr. 22, 2020), available at [https://www.eia.gov/petroleum/weekly/archive/2020/200422/includes/analysis\\_print.php](https://www.eia.gov/petroleum/weekly/archive/2020/200422/includes/analysis_print.php).

[8] See Laila Kearney, Devika Krishna Kumar, *No vacancy: Main U.S. oil storage in Cushing is all booked*, Reuters (Apr. 21, 2020), available at <https://www.reuters.com/article/us-global-oil-usa-storage/no-vacancy-main-us-oil-storage-in-cushing-is-all-booked-idUSKCN22332W>. In its latest report EIA acknowledged that “some of this physically unfilled storage is likely to have already been leased or otherwise committed, limiting the uncommitted storage available for contract holders without pre-existing arrangements.” EIA, *supra* note 2.

[9] *Id.* Other observers drew similar conclusions. See, e.g., Philip Verleger, World Energy Opinion, *Negative Prices: Never Again* (Apr. 2020), available at <http://www.energynet.com/pages/worldopinionarticle.aspx?DocID=1070756>; Izabella Kaminska, FT Alphaville, *Oil goes sub-zero* (Apr. 20, 2020), available at <https://ftalphaville.ft.com/2020/04/20/1587407982000/Oil-goes-sub-zero/>; Ian Stewart and John van Schaik, Oil Daily, *What Really Caused the Epic WTI Meltdown* (Apr. 23, 2020), available at [http://www.energynet.com/pages/eig\\_article.aspx?DocId=1070546](http://www.energynet.com/pages/eig_article.aspx?DocId=1070546); Medlock, *supra* note 2.

[10] Section 8a(9) of the CEA provides that whenever the Commission “has reason to believe that an emergency exists,” it may require a designated contract market to “take such action as in the Commission’s judgment is necessary to maintain or restore orderly trading in or liquidation of any futures contract . . . .” The statute defines the term “emergency” to mean “in addition to threatened or actual market manipulations and corners, any act of the United States or a foreign government affecting a commodity or other major market disturbance which prevents the market from accurately reflecting the forces of supply and demand for such commodity.” CEA § 8a(9); 7 U.S.C. § 12a(9). If the Commission has reason to believe that an emergency exists, the Commission can use a variety of tools to restore orderly trading, including: setting temporary emergency margin levels; fixing position limits that may apply to positions previously acquired; extending the expiration date of a futures contract; limiting trading to liquidation only; extending the time for making deliveries under the contract; and ordering the liquidation of open contracts. *Id.*; see also H.R. Conf. Rep. No. 93-1383, 93d Cong., 2d Sess. 36 (Sept. 27, 1974). In each of the four instances from 1976-1980 when the CFTC used its emergency authority, the CFTC worked with the affected exchanges prior to exercising this authority.

[11] See Report and Recommendations of the Subcommittee on Convergence in Agricultural Commodity Markets to the Agricultural Advisory Committee of the Commodity Futures Trading Commission on Convergence in Wheat with Implications for Other Commodity Markets, presented at Meeting of the CFTC’s Agricultural Advisory Committee (Oct. 29, 2009), available at [https://www.cftc.gov/About/CFTCCCommittees/AgriculturalAdvisory/aac\\_102909agenda.html](https://www.cftc.gov/About/CFTCCCommittees/AgriculturalAdvisory/aac_102909agenda.html).