

Our View: Fixing the EIA's Gross Errors

Philip K. Verleger, Jr.

August 3, 2020

PKVerleger LLC's calculations of weekly US oil production are not "estimates" but facts.

Our calculation for April 2020 published the second week of May was 12.01 million barrels per day. The US Department of Energy reported April production sixty days later of 12.06 million barrels per day. The difference was 0.4 percent

Our calculation for May 2020 published the second week of June was 9.96 million barrels per day. The DOE reported May production Friday, July 31, also sixty days later, of 10.001 million barrels per day, again an error of 0.4 percent.

These DOE data validate our approach. The DOE will report June production on August 31, 2020, of 10.4 million barrels per day. It will report July 2020 production on September 30, 2020, of 10.7 to 10.9 million barrels per day, depending on the weekly data to be released on August 5, 2020.

US production is returning to January levels. US consumption will remain depressed, though, because the CARES Act has expired and efforts to extend it have failed. The OPEC+ members need to note this because they once again face a choice between market share and price.

A Valid Estimate

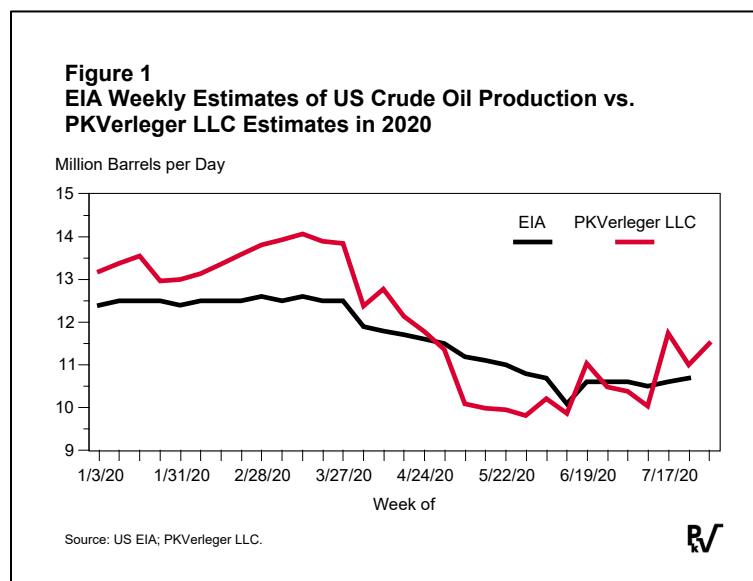
PKVerleger LLC introduced its estimate of weekly production of US crude oil in the May 4 *Notes at the Margin*. The methodology was detailed in that issue, and our calculations were labeled "estimates."

Our "estimates" have now been confirmed. The US Energy Information Administration published data for May 2020 on July 31. The agency reported that US crude oil output during the month was 10.001 million barrels per day. On Wednesday, June 10, we published our estimate of monthly production for May. Our figure was 9.96 million barrels per day. This result reflects the average of production calculated using our methodology from the EIA's five weekly reports in May. The error of forty-one thousand barrels per day is 0.4 percent.

Our estimate of April production, published May 15, was almost as close. On that occasion, we were off by fifty thousand barrels per day.

These results provide strong evidence that our approach works. The figures we report are valid assessments of current production. They are far more accurate than the estimates published by the EIA. Figure 1 compares our numbers to those published weekly by the EIA. We note the following:

The average production for April calculated from weekly DOE data was 11.65 million barrels



per day, whereas we calculated 12.01 million barrels per day. The figure published at the end of June by the EIA was 12.06 million barrels per day. The EIA error was three percent. Again, the error in our calculation was 0.4 percent.

The average production for May calculated from the weekly DOE data was 11.025 million barrels per day. Our figure was 9.96 million barrels per day. The number published in *Petroleum Supply Monthly* on July 31, 2020, was 10.001 million barrels per day. **The weekly estimate released by the EIA was only off by 1.024 million barrels per day, an error of ten percent.** The error in our procedure was 0.4 percent, as we explained above.

The EIA errors matter because the International Energy Agency, the EIA, and OPEC, as well as many private firms, use the agency's data to prepare forecasts. After noting the IEA's adoption of the EIA figure, we made the following observation in our May 18 report:

The IEA's assessment is pure fantasy. Concurrent data refute its forecast. Tanks would be overflowing today were it correct. Markets would be in extreme contango were it correct. Excess returns to storage, our now thirty-four-year measure of market strength, would be breaking new records if the IEA were correct. Brent and WTI prices would be negative were the forecast right. None of these conditions hold.

The IEA forecast and data for the United States are closely tied to the EIA's short-term estimates. The production estimates issued in the *Short-Term Energy Outlook* released May 12 are also pure fantasy.

There is little we can do to correct the errors made by IEA, EIA, or OPEC forecasters. Gresham's Law holds: bad analysis drives out the good. Today, all organizations pay heed to large consulting firms such as Rystad and IHS. Ours is a voice in the wilderness.

Our calculations do, though, contain an important warning for oil-exporting countries. The OPEC+ ministers should pay attention when their market monitoring committee meets this month.

Production quotas will likely be lifted by two million barrels per day at the meeting. Prices will probably fall, possibly to \$30 per barrel, if production is increased, given the upward trend in US output. The exporting countries may welcome a price decline as a means to suppress US output later in the year. However, some of these nations may find \$30 per barrel excessively low.

In short, OPEC+ is looking at another serious dilemma. The timelier data we produce here may help guide the members.