



MAP PUBLIC MEETING PRESENTATION May 19, 2020

Introduction

- Several key market indicators point to the importance of the state maintaining its announced schedule for adopting strong methane waste and pollution prevention rules.
- First, forecasts generally point to higher oil prices for the remainder of 2020 and beyond, suggesting that the extreme low price environment of recent weeks has passed.
- Second, natural gas prices are forecast to rise significantly by next winter, increasing the value of lost methane for the state and for industry.
- Third, the current pause in drilling creates an opportunity to put methane waste and pollution rules in place to guide operators should widespread drilling resume; and
- Fourth, industry is shutting in wells at breakneck speed to weather the current crisis, signaling that these same tools can and should be used by regulators for rule compliance and enforcement.

First, oil prices

- The industry has weathered low price environments before: during the four-month period from early December 2015 until early April 2016, WTI prices ranged from the high \$20s to the mid-\$30s.¹
- Currently, oil prices are recovering and expected to remain at levels that can support current operations and new drilling in New Mexico.
- The U.S. Energy Information Administration’s Short-Term Energy Outlook released one week ago forecast an average WTI oil price of \$30 for 2020 and \$43 for 2021.²
- On May 5th, the Legislative Finance Committee released the NM Consensus Revenue Estimating Group’s “2020 Interim Review of Revenues”, forecasting oil prices of \$23 to \$28 in 2021 and \$29 to \$37 for 2022.³
- Industry market expectations are tracked by the Federal Reserve Bank of Dallas. In their most recent Energy Survey released on March 25:⁴

¹ Energy Information Agency, Petroleum and Other Liquids Data, WTI Spot Price. *Available at* <https://www.eia.gov/dnav/pet/hist/RWTCD.htm>

² Short-Term Energy Outlook, Energy Information Agency, May 12, 2020. *Available at* <https://www.eia.gov/outlooks/steo/>

³ “2020 Interim Review of Revenues”, NM Consensus Revenue Estimating Group, May 5, 2020. *Available at* https://www.nmlegis.gov/Entity/LFC/Documents/Revenue_Reports/General_Fund_Revenue_Forecast/2020/Consensus%20Revenue%20Memo%20-%20May%202020.pdf

⁴ Energy Survey, Federal Reserve Bank of Dallas, March 25, 2020. *Available at* <https://www.dallasfed.org/research/surveys/des/2020/2001.aspx>.

- 83% of the 157 respondents expect oil prices above \$35 by the end of this year.
 - Respondents indicated they could cover operating expenses at existing wells in the Delaware Basin at prices averaging above \$26.
 - Some respondents indicated that they could drill new wells profitably in the Delaware at prices as low as \$35.
- A Bloomberg analysis last week found that new wells in core areas of the New Mexico Delaware could cover drilling and transportation costs and return 10% at a price of \$30.83.⁵
 - As of last Friday there were still 66 active drilling rigs in the state, with Eddy County hosting the most active rigs of any county in the country.⁶
 - Oilprice.com recently reported that some producers were ready to start expanding output at a WTI price of \$25.⁷ Bloomberg reported last week that according to a major midstream company shale drillers are already reopening wells.⁸ And a NMOGA spokesperson said last Wednesday that they were cautiously optimistic about a return to pre-pandemic demand levels.⁹

⁵ “Profitability Gone For U.S. Oil”, Bloomberg New Energy Finance, March 12, 2020

⁶⁶ Baker-Hughes Rig Count, May 15, 2020. Available at <https://rigcount.bakerhughes.com/na-rig-count>

⁷ “Some Shale Drillers Restart Shut-in Wells”, Oilprice.com, May 12, 2020.

⁸ *Id.*

⁹ “U.S. could face crude oil storage problem, recovery from COVID-19 could bring respite”, Carlsbad Current-Argus, May 13, 2020. Available at <https://www.currentargus.com/story/news/local/2020/05/13/us-could-face-crude-oil-storage-problem-during-coronavirus-pandemic/3120742001/>

Second, natural gas prices

- Lower oil prices are now expected to be partially offset by rising prices for natural gas.
- The Consensus Revenue Estimating Group expects declines in NM Permian oil production and shut-in of uneconomic wells to lead to significant declines in associated natural gas production in 2021 and 2022, which will ease the glut and drive local gas prices higher.
- Before the crisis, WAHA Hub futures prices had been below a dollar and expected to remain there through 2021. Now they are approaching \$2.00 for next year.¹⁰
- The EIA is forecasting Henry Hub natural gas spot prices to average about \$3.00 next year.¹¹

¹⁰ “Hey Look Ma, I Made It – Permian Natural Gas Forwards Curve Signals Better Days Ahead”, RNB Energy, April 4, 2020. Available at <https://rbnenergy.com/hey-look-ma-i-made-it-permian-natural-gas-futures-signal-better-days-ahead>, and “U.S. natgas futures rise over 4% for second day on cooler forecasts”, Reuters, April 7, 2020. Available at <https://www.reuters.com/article/us-usa-natgas/u-s-natgas-futures-rise-for-third-day-on-cool-forecasts-idUSKBN21P1RT>

¹¹ *Id.*, EIA Short-term Energy Outlook

Third, well decline rates

- The average horizontal well in the Permian declines by 86% in its first three years.¹² The EIA reported in 2016 that average well production in the Permian declined from 250 barrels per day to just over 50 barrels per day in the first year of production.¹³
- According to a 2019 report by Wood-Mackenzie, “accelerating tight oil decline rates top a growing list of concerns for Permian basin operators”.¹⁴
- We need methane rules in place before any new drilling resumes so that facilities and equipment can be designed and operated most efficiently to capture methane, send it to market, and avoid retrofits which industry has consistently claimed is more costly.

¹² “How Long Will the Shale Revolution Last”, David Hughes, Post Carbon Institute, Spring 2019. Available at <https://www.postcarbon.org/publications/how-long-will-the-shale-revolution-last/>

¹³ “Initial production rates in tight oil formations continue to rise”, Today in Energy, EIA, Available at <https://www.eia.gov/todayinenergy/detail.php?id=24932>

¹⁴ “Faster decline rates prompt Permian players to eye spending boost”, Wood McKenzie, July 22, 2019. Available at <https://www.woodmac.com/press-releases/faster-decline-rates-prompt-permian-players-to-eye-spending-boostfaster-decline-rates-prompt-permian-players-to-eye-spending-boost/>

Fourth, well shut-ins

- As reported by Bloomberg earlier this month, major producers are now curtailing supply while prices are low by turning off their newest and most prolific shale wells so that oil can be reserved in the ground and unleashed as soon as markets recover.¹⁵
- Similarly, the Independent Petroleum Association of NM last month asked the state to change its rules to facilitate well shut-ins.¹⁶
- In fact, shut-in activity is now rampant. By the end of last week, OCD reports that over 3,000 wells have sought and received permission for temporary shut-in in response to the crisis.¹⁷
- This dramatic use of shut-ins to protect private interests sets a precedent for the state to use its authority to harness these same tools to protect the public interest and safeguard royalty revenues, public health, and the climate.

¹⁵ “Shale Drillers Risk Relapse Into Rampant Oil Output at \$30 Crude”, Bloomberg, May 6, 2020. *Available at* <https://www.bloomberg.com/news/articles/2020-05-06/shale-drillers-risk-relapse-into-rampant-oil-output-at-30-crude>

¹⁶ Letter from IPANM to Governor Lujan-Grisham. EMNRD email correspondence.

¹⁷ EMNRD News Round-up – 2nd Week of May. EMNRD email correspondence.

Conclusion

- To sum up, with a near-term rebound in oil and gas prices and a resumption in new drilling emerging, the prudent course of action for the state is to move forward on schedule and get strong methane rules in place to guide oil and gas activity into the future.

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