



August 8, 2019

Via Email to rule-comments@sec.gov and
Via FedEx

Vanessa Countryman
Secretary
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, D.C. 20549-0609

Re: Petition for Rulemaking Regarding Definition of Undeveloped Oil and Gas Reserves

Dear Ms. Countryman:

Continental Resources, Inc. (NYSE: CLR) ("CLR") respectfully submits this petition to the Securities and Exchange Commission (the "Commission") to request the Commission initiate rulemaking to amend or eliminate the "five-year rule" (the "Five Year Rule") contained in the definition of "undeveloped oil and gas reserves" under Rule 4-10(a)(31)(ii) of Regulation S-X. CLR respectfully requests the Commission amend such definition to either: (1) conform the standards for the timely development of proved undeveloped reserves ("PUDs") under the Commission's rules to those contained in the Society of Petroleum Engineers' Petroleum Resource Management System ("PRMS") guidelines (the "PRMS Alignment Proposal"), or (2) replace the Five Year Rule with a ten year limit (the "Ten Year Rule") (the "Ten Year Proposal" and, together with the PRMS Alignment Proposal, the "Proposed Rule Change").

This letter contains the following sections:

- I. Background
- II. Proposed Rule Change
- III. Capital Formation and Investor Protection Considerations
- IV. Industry Support for the Proposed Rule Change
- V. Conclusion

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I. Background

The purpose of this letter is to set forth our petition for rulemaking to amend or eliminate the Five Year Rule. In our most recent conversation on May 10, 2019 (the “May 2019 Teleconference”) with representatives of the staff of the Commission (the “Staff”), Staff representatives provided specific questions and topics to be addressed in a petition for rulemaking regarding the Five Year Rule. Most of the questions are directly addressed in the body of this petition. In addition, we have provided in Annex A responses to each of the Staff’s questions and/or cross references to information contained within the body of this petition. We are eager to discuss with the Staff any additional comments or questions they may have regarding our request.

A. Impact of Shale Development

The Commission’s current rules regarding oil and gas reserves disclosures (the “2008 Rules”) were considered and adopted at a time of limited U.S. onshore domestic hydrocarbon development and significant concentration by U.S. registrants on large, offshore and international projects. By the effective date of the 2008 Rules in 2010, a number of U.S. producers had begun to rapidly increase their domestic shale development by targeting continuous formations in long-term development projects involving thousands of wells and acres. We do not believe the impact of the shale revolution was, or could have been, anticipated when the Commission developed and implemented the 2008 Rules. As a result, the 2008 Rules were developed without consideration of the extended timeline and scale of activity necessary, as demonstrated by current industry practice, for the efficient development of large continuous resource plays. The following unforeseeable developments over the decade following the adoption of the 2008 Rules underpin our belief that the Five Year Rule should be amended or eliminated now.

- As a percentage of total U.S. dry natural gas production, shale gas increased from approximately 10.5% in 2008 to approximately 68.1% in 2017,¹ and shale gas proved reserves increased from 9.0% of total U.S. proved natural gas reserves in 2007² to 66.0% in 2017.³
- From November 2008 to November 2018, tight oil production increased from 7.0% of total U.S. crude oil production to approximately 59.0%.⁴ Tight oil proved reserves as a percentage of total U.S. proved crude oil reserves increased from approximately 13.7% in 2011,⁵ the first year in which the U.S. Energy Information Administration (the “EIA”) reported total U.S. tight oil proved reserves, to approximately 48.0% in 2017.⁶

- Total natural gas proved reserves have increased 82.1% from 255.0 Tcf at year-end 2008 to 464.3 Tcf at year-end 2017, a new U.S. record for total natural gas proved reserves, with the previous record being 388.8 Tcf, set in 2014.⁷
- Over the same period, crude oil and lease condensate proved reserves increased from 20.6 BBbbl to 42.0 BBbbl, an increase of 103.9%.⁸ Meanwhile, U.S. oil production has increased 121.5% to 4.9 BBbl at the end of 2018 from 2.2 Bbbl in 2008.⁹
- The U.S. has been the world's top producer of natural gas and petroleum hydrocarbons since 2009.¹⁰ In late 2018, the U.S. surpassed Russia and Saudi Arabia to become the world's largest producer of crude oil,¹¹ and U.S. oil production has risen to its highest level in 50 years.¹² Substantially all of these increases are attributable to U.S. shale plays.
- The International Energy Agency ("IEA") expects the U.S., already a net exporter of natural gas, to become the largest exporter of liquefied natural gas by 2024¹³ and a net exporter of oil in 2021.¹⁴ The EIA has estimated the United States will become a net energy exporter as early as 2020.¹⁵
- Growth in U.S. oil and natural gas reserves and production is expected to continue into the next decade and beyond. Rystad Energy, an independent energy research firm, reported in June 2019 the U.S. has more recoverable oil reserves¹⁶ than any other country.¹⁷ In July 2018, U.S. crude oil production surpassed the 9.6 MMbbl/d record set in 1970, and reached 12.26 MMbbl/d in April 2019.¹⁸ U.S. crude oil production is expected to continue to set annual records through 2027, reaching 14 MMbbl/d through 2040.¹⁹ In 2019, dry natural gas production is expected to grow at a record annual average growth rate and reach a new record high of 91.35 Bcf/d.²⁰ The growth in both U.S. oil production from 2010 to 2025 and natural gas production from 2008 to 2023 is expected to exceed the previous global records for respective output growth by a single country.²¹ Shale will continue to drive future production increases, with lower 48 onshore tight oil production expected to increase to 68.0% of total U.S. crude oil production from 2018 to 2050 and shale gas expected to reach nearly 90.0% of total U.S. natural gas production by 2050.²²

The profound nature of these changes was unforeseeable at the time of the adoption of the 2008 Rules and makes reconsideration of the Five Year Rule necessary.

B. Comparison of Commission, PRMS and COGEH Rules

The only other comparable regulatory regimes are the PRMS guidelines and the Canadian reserves reporting rules (governed by the Canadian Oil and Gas Evaluation Handbook, or “COGEH”). Neither regime has the strict temporal cutoff contained in the Five Year Rule. The U.S. classification and reporting of PUDs under the 2008 Rules are materially more conservative than both PRMS and COGEH. The Proposed Rule Change will make the U.S. more comparable and more competitive with these standards.

PRMS. In contrast to the Commission’s Five Year Rule, the PRMS guidelines contain a principles-based facts and circumstances approach requiring projects to be commenced within a “reasonable time-frame” and accommodates economic projects taking longer than five years to develop, including deferrals to meet contractual or strategic objectives. While PRMS considers five years a “benchmark,” it specifically permits longer term development plans including large projects targeting continuous formations, provided such reserves are otherwise geologically certain and economically producible. The PRMS guidelines contain detailed requirements for achieving “commerciality,” including “evidence to support a *reasonable time-frame for development*” (emphasis added).

PRMS further outlines what is considered a “reasonable time-frame” to develop a project:

2.1.2.3 To be included in the Reserves class, a project must be sufficiently defined to establish both its technical and commercial viability as noted in Section 2.1.2.1. There must be a reasonable expectation that all required internal and external approvals will be forthcoming *and evidence of firm intention to proceed with development within a reasonable time-frame. A reasonable time-frame for the initiation of development depends on the specific circumstances and varies according to the scope of the project. While five years is recommended as a benchmark, a longer time-frame could be applied where justifiable; for example, development of economic projects that take longer than five years to be developed or are deferred to meet contractual or strategic objectives. In all cases, the justification for classification as Reserves should be clearly documented.*

Under PRMS, commodity prices are included in the economic factors considered to determine commerciality when making reserves evaluations: “Commercial assessments are conducted on a project basis and are based on the entity’s view of future conditions. The forecast commercial conditions...include, but are not limited to, assumptions of an entity’s investment hurdle criteria; financial conditions (*e.g.*, costs, prices, fiscal terms, taxes); partners’ investment decision(s); organization capabilities; and marketing, legal, environmental, social, and governmental factors.”

The PRMS guidelines, which are promulgated by the Society of Petroleum Engineers, are the most widely adopted reserves disclosure standards in the world, applicable in Argentina, Australia, Brazil, Europe, Hong Kong, Indonesia, Malaysia, Singapore and the United Kingdom. As a result, they are commonly understood internationally, and have the benefit of the consideration of multiple regulatory bodies.

COGEH. The classification of PUDs under COGEH substantially tracks PRMS. COGEH provides “development should normally proceed within five years unless there is appropriate justification with adequate explanation.” Additionally, to classify reserves as PUDs for large projects where significant capital is required for field development or infrastructure construction, significant capital expenditures should commence within three years, but there is not a requirement that such projects be fully developed within that time frame. Like PRMS, COGEH permits adequate explanations to justify a longer time frame, such as for market-related reasons, to meet contractual or strategic objectives, or other commercial justifications.

D. Arguments Against the Five Year Rule

1. Inconsistent with an Otherwise Principles-Based Rule and PRMS

In adopting the 2008 Rules, the Commission asked in the proposing release²³ (the “Proposing Release”) whether a *five*, *seven* or *ten*-year limit on booking undeveloped reserves should be adopted. This question underscores the uncertainty regarding the appropriateness of a strict temporal cutoff for the development of PUDs and, if such a limitation were imposed, its duration. It is our understanding a temporal limitation was included both because a clear cutoff was administratively expedient as well as to prevent perceived abuse by registrants with neither the intent nor the resources to develop such reserves. We continue to believe a bright line is inconsistent with the otherwise principles-based regime adopted in the 2008 Rules. We further understand five years, rather than seven or ten, was selected because the five year “benchmark” was included in the PRMS guidelines. While choosing the PRMS five year period, the Commission did not include language quoted from PRMS above permitting a period of a longer than five years if development of resources appropriately defined as “proved undeveloped” is deferred for market related reasons or to meet contractual or strategic objectives.

The Commission acknowledged in the adopting release for the 2008 Rules²⁴ the number of comments it had received objecting to the Five Year Rule and the use of the term “unusual” rather than “specific” (the PRMS exception) to describe the permitted circumstances under which PUDs could be

booked beyond five years. Commenters noted large projects, projects in remote areas, and projects targeting continuous formations all typically required greater than five years to develop, but were by no means “unusual,” and suggested the PRMS term “specific” should be adopted. In response, the Commission stated (emphasis added):

The intent of the proposal was not to exclude projects that typically take more than five years to develop from being considered reserves. We agree that the rule should allow the recognition of reserves in projects that are expected to run more than five years, regardless of whether “unusual” circumstances exist. Therefore, we have revised the rule to replace the term “unusual” with the term “specific.” We note that, as proposed, Item 1203 of Regulation S-K would require disclosure regarding why such undeveloped reserves have not been developed.²⁵

This decision indicates the Commission’s intent was to align its definition of PUDs with the PRMS guidelines and to homogenize the Five Year Rule with an otherwise principles-based approach.

Shortly before the effective date of the 2008 Rules, the Staff published their Compliance and Disclosure Interpretation (“C&DI”) 131.03, which narrows the application of the “specific circumstances” exception. While C&DI 131.03 contains a list of five circumstances which may qualify as justifying an extended development period, in over a decade of comments to issuers, the Staff has narrowly interpreted “specific circumstances” as those resulting from third party constraints only, significantly truncating the alternative circumstances PRMS considers sufficient for such an exception.

2. Fails to Anticipate Long Term Nature of Scaled Shale Development

The Five Year Rule imposes an artificially short time limit given the scope and scale of activity required to efficiently develop continuous resource plays. At the time the 2008 Rules were adopted, conventional onshore prospects generally did not require longer than five years to develop, and international, deep offshore projects often received relief under the Staff’s interpretation of “specific circumstances” in C&DI 131.03 due to third party constraints. Because the time required for development of then-nascent continuous formations was not known at the time Staff interpretations of the 2008 Rules were drafted and adopted, the 2008 Rules provided “specific circumstances” relief accommodating producers operating internationally and offshore, but failed to accommodate scaled shale development.

3. Inconsistency with PRMS and COGEH

The understatement of reserves due to the Commission's rules is evidenced by the fact that total proved reserves vary significantly for companies reporting under both (i) PRMS or COGEH and (ii) Commission reserves guidelines. After controlling for other factors, Professors Lee and Morales found BG Group's year end 2013 natural gas PUDs were 22.3% higher and Gazprom-Neft's year end 2015 natural gas PUDs were 49.2% higher, in each case, under PRMS than under Commission rules. Comparing PUDs reported under COGEH and Commission reporting yields similar results: Canadian Natural Resources ("CNR") reported a total of 2.4% greater natural gas PUDs and, for CNR's operations in the North Sea, reported 14.3% greater natural gas PUDs, in each case, under COGEH than under Commission rules for the year ended 2016.²⁶

Per Magnus Nysveen, Head of Analysis at Rystad Energy, commented as recently as June 2019 the 20% difference in U.S. reported oil reserves between the BP Statistical Review and Rystad Energy's report was "due to higher reserves reported by the operators *and is based on more stringent rules from the [Commission]*" (emphasis added).²⁷

4. Results in Split Reserves Requirements

Professors Morales and Lee also noted the confusion in reserves categorization caused by the Five Year Rule's strict cutoff by pointing to examples of companies classifying reserves that otherwise meet the geological and commercial requirements for proved reserves as probable reserves because the project was not going to be developed within five years. This results, as observed by Professors Morales and Lee, in "proved reserves that are 'reasonably certain' placed in a less-certain category and...called probable reserves, creating a distorted reserves-reporting framework, in which the 5-year limit used for commercial project considerations...is also used to establish uncertainty in the categorization of the project's reserves."²⁸

We believe that issuers generally have elected not to recognize at all these "to be developed in more than five years" reserves rather than present them as "probable" as a result of this discrepancy. The 2008 Rules expanded reportable reserves categories to include probable and possible reserves, but in practice, we believe most issuers have determined that labeling proved reserves as probable is not appropriate for resources meeting the geologic and commercial requirements to be classified as proved and understates their value to the company and investors. Our review of the most recent 10-Ks filed by 33 SEC registrants confirmed that none present probable or possible reserves.

The confusion caused by these split requirements is also reflected in the Staff's consideration of reserves categorization in evaluating what the industry refers to as "drillcos." When considering the accounting treatment of certain oil and natural gas development transactions with third parties, our experience is the Staff has considered resources PUDs even if not scheduled to be developed within five years given their geologic certainty and economic producibility.

5. Adverse Economic Consequences

The Five Year Rule has multiple adverse economic consequences.

- *Financing Constraints.* Proved reserves are used by lenders, analysts, investors and others to evaluate loans, investments and other transactions. For example, the borrowing capacity under many producers' credit facilities is limited to a borrowing base determined by reference to proved reserves. In addition to limiting available credit, producers at risk of falling below the proved reserves thresholds required to maintain their borrowing base may be incentivized to rush development to maintain the classification of certain reserves as PUDs, in some cases resulting in development before midstream infrastructure has been optimally constructed and operational expertise has been sufficiently developed to allow the most capital-efficient and complete production of hydrocarbons. In addition, midstream service providers seeking to maximize volume throughput on their pipeline systems are keenly interested in a producer's proved reserves and expected production. The inability to fully report its proved reserves may lead to a misallocation of investment capital by midstream companies or the failure to construct midstream infrastructure sufficient to accommodate production.

Recently, commenting on the current shortage in midstream infrastructure as part of an extensive series titled "Decoding the O&G downturn," Deloitte researchers noted (emphasis added):

"After the oil downturn started in mid-2014, midstream companies, skeptical of the sustainability of then high-cost US shale production, *broke the linear relationship with upstream investments and slashed their capital programs*. Despite realizing that they were risking their future growth, most midstream companies reduced their investments seeing rising cost of capital, falling returns, and high distribution

commitments. *But then, shale companies surprised them by delivering phenomenal volume growth even in a low-price environment.*²⁹

Because of the underdevelopment caused by a reactive strategy, midstream service providers began to proactively make capital expenditures on infrastructure, but efficient midstream buildout may remain disadvantaged because midstream service providers have an incomplete picture of reserves and associated future production.

Because shale development does not generally qualify for the “specific circumstances” exception permitting recognition beyond five years, as compared to international and offshore development, shale developers are at a disadvantage in obtaining financing and necessary midstream infrastructure.

- *Shale Development Requires Extended Development Timelines to Maximize Efficiency.* Expenditures for shale development are not limited to drilling and completion. Shale resource development is a large scale endeavor in which significant expenditures are required to identify prospective areas, obtain leases, identify the extent of productive hydrocarbons, hold leases by drilling, delineate multiple productive formations and construct needed infrastructure to support development and production. Efficient development also requires ongoing evaluation of results from new production techniques and technological improvements. Obtaining the knowledge base to efficiently develop the vast shale resources within the U.S. is a continuous and expensive process, requiring the kind of capital commitment that can be rationally and economically justified only by the existence of hydrocarbons requiring far greater than five years to develop. Maximizing the production efficiency of these resources requires producers to adapt and adjust development plans to incorporate knowledge gained through the completion and production process. The Five Year Rule may impede such adjustments while a longer-term development horizon would promote more efficient and responsible development and production.
- *Short Time Cutoff Promotes Inefficient Development.* The Five Year Rule’s strict cutoff incentivizes inefficient resource development and can result in development operations with an environmental footprint greater than would be required under more deliberately-paced development plans. The short cycle times required by the Five Year Rule discourage long-term planning that would otherwise permit more efficient, deliberately-paced

development tied to the construction of gathering systems, pipelines and other infrastructure. Paced development enables the construction of midstream infrastructure that can dramatically decrease the impact of hydrocarbon production on local communities by reducing truck and rail traffic and flaring excess natural gas.³⁰

- *Understatement of Reserves.* The material understatement of total U.S. reserves has negative strategic consequences because of an incomplete picture of U.S. natural reserves, as noted by the 2019 Rystad report quoted above.

II. Proposed Rule Change

We respectfully request the Commission initiate rulemaking with respect to the PRMS Alignment Proposal or the Ten Year Proposal as set forth below:

A. PRMS Alignment Proposal

To align Commission rules regarding the reporting PUDs with the PRMS guidelines, specifically the determination of commerciality of reserves based on a reasonable time frame for development, we respectfully request the Commission amend the definition of “Undeveloped oil and gas reserves” in Rule 4-10(a)(31)(ii) to incorporate Section 2.1.2.3 of the PRMS guidelines, as set forth in blackline below:

(31) *Undeveloped oil and gas reserves...*

(ii) Undrilled locations can be classified as having undeveloped reserves only if a development plan has been adopted indicating that they are scheduled to be drilled within ~~five years, unless the specific circumstances, justify a longer time~~ a reasonable time-frame. A reasonable time-frame for the initiation of development depends on the specific circumstances and varies according to the scope of the project. While five years is recommended as a benchmark, a longer time-frame could be applied where justifiable; for example, development of economic projects that take longer than five years to be developed or are deferred to meet contractual or strategic objectives. In all cases, the justification for classification as undeveloped reserves should be clearly documented.

In addition, while we believe the Staff interpretation contained in C&DI 131.03 would generally remain applicable, portions of such C&DI would require modification. For example, the fifth bullet point of C&DI 131.03 suggests that a delay in development beyond five years should not result from internal

factors, whereas the PRMS guidelines permits delay due to strategic objectives. We expect that along with the Proposed Rule Change, this fifth bullet should be rescinded or the interpretation of C&DI 131.03 revised to provide equal consideration of each of the five enumerated factors. Either of these revisions would align the Staff's application of such C&DI with the factors outlined in PRMS. The PRMS Alignment Proposal would apply to all oil and gas reserves, not simply those produced from continuous formations.

If the PRMS Alignment Proposal is viewed favorably by the Staff, we are happy to assist the Commission in providing comments and/or assistance in developing the final rule.

B. Ten Year Proposal

While we believe the PRMS Alignment Proposal is the more appropriate of the Proposed Rule Changes, given its consistency with the principles-based structure otherwise adopted in the 2008 Rules and its approval by multiple international jurisdictions, we understand the Commission and the Staff may have a preference to retain a bright line cutoff to provide continuity with existing guidance provided to registrants. If so, we propose, as an alternative, replacement of the Five Year Rule with the Ten Year Rule. We believe the Ten Year Proposal strikes a better balance between the lengthier development horizon of continuous resource plays while maintaining a bright line cutoff. In addition, the Ten Year Proposal would generally enable the Staff to continue to rely on existing C&DIs, as well as much of the Staff's existing guidance to issuers with respect to the Five Year Rule, in each case, as modified for the longer period.

We believe the Ten Year Proposal would largely mitigate the adverse consequences of the Five Year Rule described above by providing a more complete view of a company's undeveloped reserves potential. The advantages of this transparency are articulated above in greater detail: buildout of midstream infrastructure, efficient allocation of capital, community and environmentally responsible project development and alignment of U.S reserves disclosure with those reported in other countries, better access to capital and greater transparency in reserves reporting. In addition, a Ten Year Rule would promote the orderly and efficient development of the nation's vast shale resources and required midstream infrastructure development.

Finally, we believe a Ten Year Rule, when combined with the inherently self-limiting concept of reasonable certainty and existing disclosure requirements, should allay any concerns about investor protection.

Therefore, in the alternative, we respectfully request the Commission initiate rulemaking to replace the Five Year Rule with the Ten Year Rule as set forth below:

(31) *Undeveloped oil and gas reserves...*

(ii) Undrilled locations can be classified as having undeveloped reserves only if a development plan has been adopted indicating that they are scheduled to be drilled within five-ten years for continuous formations, and five years for traditional formations, unless the specific circumstances, justify a longer time.

III. Capital Formation and Investor Protection Considerations

The mandate of the Commission is to protect investors, maintain fair, orderly and efficient markets, and facilitate capital formation.³¹ Chairman Clayton, in a recent speech, stated if there are “obstacles preventing the efficient flow of capital...we should be striving to break them down, while at the same time being always mindful of our commitment to investor protection...It is important for the SEC to review our regulations to ensure that they are consistent with our ever-evolving capital markets.”³²

A. Capital Formation Considerations

The Five Year Rule has multiple adverse economic consequences for efficient hydrocarbon development in the United States, as described above under “Financing Constraints,” “Shale Development Requires Extended Development Timelines to Maximize Efficiency,” “Short Time Cutoff Promotes Inefficient Development” and “Understatement of Reserves.” The Proposed Rule Change would mitigate these consequences by providing greater transparency of proved reserves contained in unconventional shale plays in the United States, facilitating the efficient formation of capital for companies developing these resources. Moreover, the Proposed Rule Change will make the U.S. capital markets more competitive (and comparable) to foreign jurisdictions and their exchanges. As observed by Professors Lee and Morales:

The SEC five year rule can be a major constraint for countries, NOCs [national oil companies] or companies listing on the NYSE. These companies sometimes have up to ten years of development plans or longer (e.g., drilling) adopted by management as part of their investment, production strategy and business plans. This issue can have negative effects for countries, NOCs or companies that have a solid inventory of matured

upcoming projects as part of their development plans and which, at a given moment, are projects classified as “Justified for Development” under the PRMS reserves sub-classes. Some press articles have highlighted the impact of the strict enforcement of the five year rule when companies that may have an IPO on the NYSE must report under SEC regulations (internal cite to Oil and Money, October 19, 2016).

B. Investor Protection Considerations

From the investor’s perspective, the Proposed Rule Change provides both a more complete understanding of the issuer’s resources (more transparency) balanced by the ability to assess the risks associated with full PUD development through existing Subpart 1200 disclosure requirements.

1. Provides Investors with Greater Transparency

The Five Year Rule disadvantages investors by providing an incomplete and potentially inaccurate representation of reserves in continuous formations. As indicated in I.D.4 above, Professors Lee and Morales identified multiple prior instances of issuers presenting as “probable reserves” those resources that would otherwise be treated as PUDs under Commission definitions without the Five Year Rule and with certainty under PRMS standards. The result is that “Probable Reserves” may vary substantially in quality and/or likelihood of ultimate commerciality between issuers electing to make such disclosures. More importantly, our review of the most recently-filed 10-Ks for 33 Commission registrants indicates that none disclose probable or possible reserves. We believe that resources meeting the requirements for PUDs absent the Five Year Rule go unreported because issuers believe doing so would understate the certainty and value of such reserves. The result is confusing and/or incomplete reserves disclosure, depriving U.S. investors of information that is material to their investment decisions.

2. Existing Disclosure Requirements Provide Investors with Adequate Protection

The current disclosure requirements contained in Subpart 1200 of Regulation S-K, as well as the extensive financial disclosures mandated by ASC 932, adequately protect investors from the abuse of PUD bookings by requiring issuers to clearly disclose the pace of PUD conversions. Subpart 1200 requires disclosure of (a) the total quantity of PUDs at year end, (b) material changes in PUDs that occurred during the year, including PUDs converted into proved developed reserves, (c) investments and progress made during the year to convert PUDs into proved developed reserves, including, but not limited to, capital

expenditures and (d) an explanation of the reasons why material amounts of PUDs in individual fields or countries remain undeveloped for five years or more after disclosure as PUDs. None of these requirements need be changed by our proposal. These currently-required disclosures provide valuable information to investors regarding PUD quantities and the effort and investment being made by the registrant to develop its PUDs, allowing investors to critically analyze the quality of a producer's PUD bookings and its success in converting PUDs to producing reserves. While the Proposed Rule Change would expand the length of time reserves can be classified as PUDs, these existing disclosure requirements clearly provide investors with the information necessary to evaluate the pace of conversion of a company's PUD inventory. In addition, we believe that the stringent internal control requirements applicable to public companies generally provide additional protection against overstatement of undeveloped reserves.

Any rulemaking related to the Five Year Rule could also include (a) extending (i) the disclosure related to capital expenditures and PUD conversion table under Item 1203(c) and (ii) the lookback period under Item 1203(d) to give investors additional information as to the pace at which a company is converting PUDs and necessary capital expenditures to fully develop disclosed PUDs and (b) a discussion of risks and uncertainties associated with a company's PUD development plan. For example, we would anticipate modifying our reserves-related risk factors as appropriate to reflect the changes to the length (in years) of our development plan. We are also open to discussing any additional disclosures the Staff or the Commission may feel appropriate for inclusion if the Proposed Rule Change is adopted.

IV. Industry Support for the Proposed Rule Change

We believe there is broad industry support to revise the Five Year Rule. Moreover, the continued relevance of comments received by the Commission in 2008 demonstrate that strong industry support exists for the Proposed Rule Change. In response to the Commission's question in the Proposing Release³³ as to whether a *five*, *seven* or *ten*-year limit on booking undeveloped reserves should be adopted, multiple commenters at the time stressed the Five Year Rule should not be adopted because it would not accommodate the current and future realities of burgeoning shale development. Among the most predictive of the comments received in 2008:

- *TOTAL S.A.* noted the mismatch between the Five Year Rule and actual development cycles of unconventional oil and natural gas projects would "give[] investors a partial, short-term view of recoverable proved volumes."³⁴ As stated above under "Inconsistency with PRMS and COGEH," companies reporting under the Commission rules report materially lower PUDs than under PRMS or COGEH.

- *Shell* noted the Five Year Rule would cause producers and midstream service providers to inefficiently allocate resources to attempt to accommodate abbreviated drilling schedules, or to only undertake projects able to be completed within five years.³⁵ As discussed above under “Adverse Economic Consequences,” midstream service providers have been unable to efficiently align their own capital expenditures with projected future resource development, resulting in a mismatch between supply and demand for midstream infrastructure. *Shell* also noted that because the EIA uses Commission reserves in its calculation of domestic petroleum reserves, the Five Year Rule would significantly understate U.S. energy resources in relation to its global peers.³⁶ *Shell* further stated “We believe for shareholders to be able to properly evaluate a company’s oil and gas prospects they should have disclosure of all proved reserves that meet the Reasonable Certainty definition. By removing the disclosure of certain PUDs from Commission filings we believe shareholders would be placed at a significant disadvantage from current rules...”
- *American Clean Skies Foundation*. “Limitation of proven undeveloped reserves to a five-year life...is entirely arbitrary and without any technical foundation. Bringing a natural gas play from concept to commercial reality often takes years to establish...This is especially true for unconventional resources found in continuous accumulations, like tight gas sands and shale gas, for which it takes a long time to drill all the undeveloped locations.”
- *Exxon*. “We strongly recommend that the staff avoid the use of arbitrary time deadlines or other bright line tests...as these will be inconsistent with a principles-based regime.”
- *Petro-Canada*. “Although the SPE PRMS also recommends the 5 year limit for PUDs, we believe that this should be a more principle based rule – the principle being the company’s commitment or intent to develop these PUDs. In many cases 5 years is more than sufficient and in other cases...development may occur over a period of 10 years or more...”
- *EnCana*. “For continuous accumulations, PUD assignments associated with an active development plan could extend beyond five years, with reasonable certainty.”

These concerns, we believe, would be amplified if the Five Year Rule were proposed today given the remarkable changes resulting from shale development outlined in section I.B. of this petition, “Impact of Shale Development.” In addition to the comments described immediately above, a more complete list

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of comments on the Proposing Release regarding the Five Year Rule are provided in response to question 2 on Annex A.

V. Conclusion

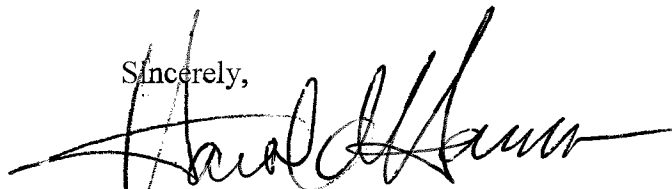
For the foregoing reasons, as well as those set forth on Annex A hereto, we respectfully request the Commission initiate rulemaking to amend or eliminate the Five Year Rule contained in the definition of “undeveloped oil and gas reserves” under Rule 4-10(a)(31)(ii) of Regulation S-X to either: (1) conform the standards for the determination of PUDs under the Commission’s rules to those contained in the PRMS guidelines, or (2) replace the Five Year Rule with the Ten Year Rule.

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We greatly appreciate your review of this letter and our proposals, and we welcome the opportunity to discuss with the Staff. If you have any questions, please do not hesitate to call David P. Oelman at (713) 758-3708 or me at (404) 234-9000.

Sincerely,

A handwritten signature in black ink, appearing to read "Harold Hamm", with a long horizontal flourish extending to the right.

Harold Hamm
Chief Executive Officer

cc: The Honorable Jay Clayton, Chairman, U.S. Securities and Exchange Commission
The Honorable Commissioner Robert J. Jackson, Jr., U.S. Securities and Exchange Commission
The Honorable Commissioner Hester M. Peirce, U.S. Securities and Exchange Commission
The Honorable Commissioner Elad L. Roisman, U.S. Securities and Exchange Commission
Eric Eissenstat, Senior Vice President, General Counsel, Chief Risk Officer and Secretary
David P. Oelman, Vinson & Elkins L.L.P.

ANNEX A

Responses to Specific Inquiries by the Staff in the May 2019 Teleconference

1. *What is the proposed rule’s impact on CLR and others across the industry?*

While we cannot predict with certainty the impact the Proposed Rule would have on other industry participants, we expect the amount of PUD reserves to increase relative to the amounts currently reported by U.S. onshore producers operating in continuous resource plays. In CLR’s case, we estimate total reserves as of December 31, 2018 would have increased by 16% and PUDs would have increased 28% in the absence of the Five Year Rule and the adoption of the PRMS Alignment Proposal or the Ten Year Proposal. This estimate suggests PUD reserves may increase materially, but not dramatically. This result is directionally consistent with the comparisons between SEC, PRMS and COGEH PUD reserves identified in the petition under “Inconsistency with PRMS and COGEH.”

2. *Are there comments by others in support of this petition?*

As discussed in the accompanying petition, we expect other industry participants to support amending or eliminating the Five Year Rule. In addition, multiple industry participants commenting on the Proposing Release predicted the Five Year Rule would not accurately reflect unconventional resources. While a number of these comments were excerpted in the body of the petition, the following contains additional detail:

<u>Excerpt</u>	<u>Commenter</u>
“Additionally, as the demand for energy continues to increase, projects to extract difficult resources such as coalbed methane gas, tight gas, oil shales, and oil sands will be vital in meeting the US energy needs. These vital resources would be placed at a significant disadvantage; as such projects are often complex and can take longer than five years to develop. This significant disadvantage could lead to the under development of these critical resources to the detriment of US consumers. In addition, this would limit the estimate of U.S. petroleum reserves as captured by the DOE-EIA, which relies on proved reserves reporting. . . . Companies will choose development schedules that are the most profitable to the company and thus the most beneficial to shareholders. We believe for shareholders to be able to properly evaluate a company’s oil and gas prospects they should have disclosure of all proved reserves that meet the Reasonable Certainty definition. By removing the disclosure of certain PUDs from Commission filings we believe shareholders would be placed at a significant disadvantage from current rules, as a portion of the true PUDs with Reasonable Certainty, would not be disclosed.”	Letter from Shell International B.V. (Sept. 8, 2008), https://www.sec.gov/comments/s7-15-08/s71508-38.pdf .
“We strongly oppose any proposed time limitation. Limitation of proven undeveloped reserves to a five-year life, or any other specific timeframe, is entirely arbitrary and without any technical foundation. Bringing a natural gas play from concept to commercial reality often	Letter from American Clean Skies Foundation (Sept. 5, 2008),

<p>takes years to establish. And even once commercial development has been established, many gas fields take decades to completely exploit. This is especially true for unconventional resources found in continuous accumulations, like tight gas sands and shale gas, for which it takes a long time to drill all the undeveloped locations.”</p>	<p>https://www.sec.gov/comments/s7-15-08/s71508-26.pdf.</p>
<p>“Given the increasing scale and life of industry development projects, we believe the proposed five-year test (or any other ‘bright line’ test) will apply to an increasingly significant percentage of projects and related reserves and, therefore, will not be ‘unusual’ in occurrence as the rule proposal seems to anticipate. Consequently, this additional test will significantly add to the new disclosure burden created by the overall rule proposal. We strongly recommend that the staff avoid the use of arbitrary time deadlines or other bright line tests throughout the final rule proposal as these will be inconsistent with a principles-based regime. We do not believe that the proposed changes to the PUDs definition, or for that matter any of the other proposed rule changes, increase the risk of abuse. We believe that abuse prevention is adequately addressed by the extensive Sarbanes-Oxley rules that require companies to have in place an effective system of internal controls over their financial reporting and disclosure systems, which includes the reserves reporting process.”</p>	<p>Letter from Exxon Mobil Corporation (Sept. 5, 2008), https://www.sec.gov/comments/s7-15-08/s71508-25.pdf.</p>
<p>“It is not appropriate to prohibit a company from assigning proved status to undrilled locations if not scheduled to be drilled more than 5 years. Although the SPE PRMS also recommends the 5 year limit for PUDs, we believe that this should be a more principle based rule – the principle being the company’s commitment or intent to develop these PUDs. In many cases 5 years is more than sufficient and in other cases (such as major offshore or oil sands projects) development may occur over a period of 10 years or more and 5 years is too short a limit.”</p>	<p>Letter from Petro-Canada (Sept. 8, 2008), https://www.sec.gov/comments/s7-15-08/s71508-50.pdf.</p>
<p>“Prohibiting a company from assigning proved status to undrilled locations if the locations are not scheduled to be drilled within 5 years, absent unusual circumstances, is more or less consistent with PRMS and others. However, it would be difficult to both envision and specify all types of unusual circumstances. In fact, we would submit that in the case of the development of continuous accumulations, the circumstances may not be that ‘unusual.’ For continuous accumulations, PUD assignments associated with an active development plan could extend beyond five years, with reasonable certainty.”</p>	<p>Letter from EnCana Corporation (Sept. 8, 2008), https://www.sec.gov/comments/s7-15-08/s71508-47.pdf.</p>
<p>“The recognition of continuous accumulations as proved reserves – and the nature of them – conflicts with the notion of a fixed timeframe for development.”</p>	<p>Letter from Newfield Exploration Company (Sept. 8, 2008), https://www.sec.gov/comments/s7-15-08/s71508-39.pdf.</p>

3. Please address the mandates of the SEC: investor protection and capital formation. How would a ten year rule meet these mandates, and identify specific shortcomings in the current rules.

Please see section III above.

4. Is the market making economically inefficient decisions as a result of the current rules?

Please see section III above.

5. *The key principle for PUDs is the "reasonable certainty" of commercial production, such that reserves will begin to generate cash flows in accordance with a development plan. Therefore, even with the change to the five year rule, would there still need to be an adopted plan with reasonable certainty of commercial production/economic producibility? The SEC views the main issue of PUDs not as a specific time horizon, but whether there is confidence that the reserves can be produced.*

The definitions of “proved oil and gas reserves” and “reasonable certainty” focus on (i) the geologic certainty that a particular quantity of hydrocarbons may be recovered and (ii) the economic producibility of such reserves under existing economic conditions. While existing Commission rules and the PRMS require the demonstration of commerciality / intent to develop / adoption of development plan, neither such Commission definitions on their own, nor the PRMS guidelines, require that such quantities be converted into hydrocarbon sales within five years. Accordingly, we believe the definition of proved reserves requires demonstration of “reasonable certainty.” Moreover, we believe Subpart 1200 disclosures regarding PUD conversion rates provide adequate protection to investors to fairly evaluate their rate of development.

Recent experience demonstrates the long-term commitment of owners of shale reserves to continue development despite dramatic commodity price swings. The time and resources invested in learning how to more efficiently develop these resources allowed exploration and production (“E&P”) companies to withstand the attempt by the Organization of Petroleum Exporting Countries to curtail U.S. shale production growth by “opening the taps” in late 2015. While higher commodity prices spurred the early development of shale resources, E&P companies obtained the expertise to successfully develop these resources in a wide range of commodity prices. These strategies were successful as demonstrated by the fact that, from September 2014 to May 2016 and following a collapse in oil prices, U.S. oil production fell by only 0.1%³⁷ and U.S. dry natural gas production increased 4.9%³⁸ while the rig count fell by 79.1% over same period³⁹ – an achievement only possible with the long-term orderly development pursued by a number of shale players. This demonstrates, we believe, the development commitment of E&P companies, even in a poor commodity price environment.

6. *Will all of the factors in C&DI 108.01 (development project) and 131.04 (adoption) to find a development project remain in place?*

Under our Proposed Rule Change, C&DI 108.01 and 131.04 could remain as written. With respect to C&DI 108.01, we believe that many field- or play-based shale development projects will constitute “development projects” under appropriate circumstances. With respect to C&DI 131.04, we contemplate that an issuer would have made an internal investment decision to pursue the development of all reported PUDs, whether scheduled for drilling during or after the five year benchmark.

7. ***Presumably there is greater reserves uncertainty in the 6-10 year range. How would reasonable certainty be addressed in the 6-10 year period? Provide a detailed examination of different disclosure that would be necessary to demonstrate to the SEC the difference between PUDs in years 1-5 and 6-10 and for investors to understand the increased uncertainty.***

As described in response 5 above, any PUD booked must meet the same geologic certainty and economic producibility requirements required for proved reserves, irrespective of whether development is scheduled for years one through five or six through ten. These geologic and economic requirements are embedded in both the PRMS Alignment Proposal and the Ten Year Proposal. Moreover, we believe the Subpart 1200 disclosures adequately inform investors regarding the pace of PUD conversion each year as well as over time in the case of either proposal. We would anticipate modifying our reserves-related risk factor as appropriate to reflect the changes in our PUD bookings as the result of the Proposed Rule Change, including the clear disclosure of the longer period of time over which we expect to develop our PUDs.

8. ***How do you reconcile increased uncertainty as you approach 10 years with the PUD reasonable certainty requirement?***

Please see our response to questions 5 and 7. Additionally, the disclosure discussed under “Investor Protection Considerations” would provide investors with the necessary information required to assess a company’s ability to convert PUDs into proved, developed, producing reserves if the Ten Year Proposal were adopted.

9. ***Would the revised rule be consistent with PRMS and COGEH approaches, and, if not, why would that not be a concern?***

The PRMS Alignment Proposal would bring the treatment of PUDs into alignment with PRMS.

Our Ten Year Proposal would not be entirely consistent with PRMS or COGEH, but would be more consistent than the current Five Year Rule and would otherwise maintain consistency with the Commission’s bright line cutoff. As stated under “Replace the Five Year Rule with the Ten Year Rule,” we believe the Ten Year Proposal would leave intact existing Commission comments, rulemaking, C&DI and other guidance, as modified to ten years.

10. ***Explain if and how you have considered the impact of a 10 year rule on comparability between and among companies.***

If the PRMS Alignment Proposal were adopted, greater comparability among E&P companies’ reporting under Commission and PRMS guidelines would be achieved.

We anticipate the Ten Year Rule would promote comparability among E&P companies developing continuous formations. Additionally, as described under “Fails to Anticipate Long Term Nature of Scaled Shale Development,” we believe the Ten Year Rule would put reserves reporting for unconventional resource development on the same plane as offshore and onshore conventional resource development which are currently granted “specific circumstance” exemptions from the Five Year Rule. Doing so levels the playing field for all E&P companies regardless of operating environment.

11. Please identify/explain/discuss the impact of a 10 year rule on non-shale activities, or, alternatively, make clear it should only apply to shale.

We propose the Commission apply the PRMS Alignment Proposal to all oil and gas reserves. We propose the Commission apply the Ten Year Proposal to continuous formations only.

12. To the extent any other rulemaking is petitioned for, fully explain such framework.

We are not making any additional requests for rulemaking. However, we note that if the Commission adopts the PRMS Alignment Proposal, it may be necessary to incorporate certain definitions and other supporting reserves-related structures from the PRMS guidelines in connection therewith.

13. If the pre-2008 framework better served presentation of reserves, specify which ones, and how and why the 2008 rules no longer serve such interests.

We would not propose a return to the pre-2008 framework other than to the extent the Proposed Rule Change would be more consistent with PUD reporting prior to such time. We do not otherwise suggest any return to pre-2008 rules.

ENDNOTES

¹ See U.S. Energy Information Administration, *U.S. Shale Production* (November 28, 2018), https://www.eia.gov/dnav/ng/hist/res_epg0_r5302_nus_bcfa.htm; U.S. Energy Information Administration, *U.S. Dry Natural Gas Production* (May 31, 2019), <https://www.eia.gov/dnav/ng/hist/n9070us2A.htm>.

² U.S. Energy Information Administration, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves 2007 Annual Report* (Feb. 2009), <https://www.eia.gov/naturalgas/crudeoilreserves/archive/2007/full.pdf>. The U.S. Energy Information Administration definition of proved reserves tracks that of the Commission as set forth in Rule 4-10(a)(22)(v). The EIA defines “proved reserves” as the estimated volumes of hydrocarbon resources that analysis of geologic and engineering data demonstrates with reasonable certainty are recoverable in future years from known reservoirs under existing economic and operating conditions. To develop its reports, it collects independently developed estimates of proved reserves from a sample of operators of U.S. oil and natural gas fields using its survey Form EIA-23L, and then estimates the non-reported portion of proved reserves. The year-end 2017 report is based on responses received from 412 out of 418 sampled operators. See U.S. Energy Information Administration, *U.S. Crude Oil and Natural Gas Proved Reserves, Year-end 2017* (June 26, 2019), <https://www.eia.gov/naturalgas/crudeoilreserves/>, and *Annual Survey of Domestic Oil and Gas Reserves, Form EIA-23L, County Level Survey Instructions*, https://www.eia.gov/survey/form/eia_23l/instructions.pdf, at 12.

³ U.S. Energy Information Administration, *U.S. Crude Oil and Natural Gas Proved Reserves, Year-end 2017*, *supra* note 2.

⁴ U.S. Energy Information Administration, *U.S. Monthly Crude Oil Production Exceeds 10 Million Barrels Per Day, Highest Since 1970* (Feb. 1, 2018), <https://www.eia.gov/todayinenergy/detail.php?id=34772>; U.S. Energy Information Administration, *Frequently Asked Questions: How much shale (tight) oil is produced in the United States?* (March 8, 2019), <https://www.eia.gov/tools/faqs/faq.php?id=847&t=6>.

⁵ See U.S. Energy Information Administration, *U.S. Crude Oil and Natural Gas Proved Reserves* (Aug. 1, 2013), <https://www.eia.gov/naturalgas/crudeoilreserves/archive/2011/index.php>; U.S. Energy Information Administration, *U.S. Crude Oil Proved Reserves* (Feb. 13, 2018), https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=RCRR01NUS_1&f=A.

⁶ See U.S. Energy Information Administration, *U.S. Crude Oil and Natural Gas Proved Reserves, Year-end 2017*, *supra* note 2; U.S. Energy Information Administration, *U.S. Crude Oil Proved Reserves*, *supra* note 5.

⁷ U.S. Energy Information Administration, *U.S. Crude Oil and Natural Gas Proved Reserves, Year-end 2017*, Figure 10 Data, *supra* note 2.

⁸ U.S. Energy Information Administration, *U.S. Crude Oil and Natural Gas Proved Reserves, Year-end 2017*, Figure 1 Data, *supra* note 2.

⁹ BP, *BP Statistical Review of World Energy June 2019, Oil Production in million tonnes* (June 2019), <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2019-full-report.pdf>, at 17.

¹⁰ U.S. Energy Information Administration, *United States remains the world’s top producer of petroleum and natural gas hydrocarbons* (May 21, 2018), <https://www.eia.gov/todayinenergy/detail.php?id=36292/>.

¹¹ U.S. Energy Information Administration, *The United States is now the largest global crude oil producer* (September 12, 2018), <https://www.eia.gov/todayinenergy/detail.php?id=37053>.

¹² U.S. Energy Information Administration, *U.S. energy consumption, production, and exports reach record highs in 2018* (May 9, 2019), <https://www.eia.gov/todayinenergy/detail.php?id=39392>.

¹³ International Energy Agency, *Gas 2019, Analysis and forecasts to 2024*, <https://www.iea.org/gas2019/>.

¹⁴ International Energy Agency, *Oil 2019, Analysis and forecasts to 2024*, <https://webstore.iea.org/download/summary/2446?fileName=English-Oil-2019-ES.pdf>.

¹⁵ U.S. Energy Information Administration, *The United States is Projected to Become a Net Energy Exporter in Most AEO2018 Cases* (Feb. 12, 2018), <https://www.eia.gov/todayinenergy/detail.php?id=34912>.

¹⁶ To calculate “recoverable” oil, Rystad Energy estimates proved reserves using PRMS guidelines to compare reserves consistently across the world, and includes expected production from future discoveries as deemed likely by Rystad Energy according to its database. Rystad Energy attributes the increase in recoverable oil in the U.S. to a doubling of hydraulic fracturing operations in the Permian basin in 2018 and to improvements by operators to well configuration in 2019. Rystad Energy, *The United States Again Holds More Recoverable Oil than Saudi Arabia* (June 15, 2018), <https://www.rystadenergy.com/newsevents/news/press-releases/united-states-recoverable-oil/>; Rystad Energy, *United States Cements its Position as World Leader in Oil Reserves* (June 12, 2019), <https://www.rystadenergy.com/newsevents/news/press-releases/United-States-cements-its-position-as-world-leader-in-oil-reserves/>.

¹⁷ Rystad Energy, *United States Cements its Position as World Leader in Oil Reserves*, *supra* note 16.

¹⁸ U.S. Energy Information Administration, *U.S. Field Production of Crude Oil* (last visited June 30, 2019), <https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MCRFPUS2&f=M>.

¹⁹ U.S. Energy Information Administration, *Annual Energy Outlook 2019*, at 16 (Jan. 24, 2019), <https://www.eia.gov/outlooks/aeo/pdf/AEO2019.pdf>.

²⁰ U.S. Energy Information Administration, *Short-Term Energy Outlook* (June 11, 2019), <https://www.eia.gov/outlooks/steo/report/natgas.php>.

²¹ International Energy Agency, *World Energy Outlook 2017* (Nov. 14, 2017), <https://www.iea.org/weo2017>.

²² U.S. Energy Information Administration, *Annual Energy Outlook 2019* (Jan. 24, 2019), <https://www.eia.gov/outlooks/aeo/pdf/AEO2019.pdf>.

²³ Securities and Exchange Commission, *Modernization of Oil and Gas Reporting Requirements; Proposed Rule*, Release Nos. 33-8935; 34-58030; FR-73; File No. S7-15-08 (Jul. 9, 2008), <https://www.sec.gov/rules/proposed/2008/33-8935fr.pdf>.

²⁴ *See* Securities and Exchange Commission, *Modernization of Oil and Gas Reporting; Final Rule*, Release Nos. 33-8995; 34-59192; FR-78; File No. S7-15-08 (Dec. 31, 2008), <https://www.sec.gov/rules/final/2008/33-8995.pdf>, at 10.

²⁵ *Id.*, at 31-32.

²⁶ Enrique Morales and W. John Lee, *SEC and PRMS Proved Reserves: Why Differences Still Exist* (July 2018).

²⁷ Rystad Energy, *United States Cements its Position as World Leader in Oil Reserves*, *supra* note 16.

²⁸ E. Morales and W.J. Lee, *Undeveloped Reserves and the Five-Year Time Limit: Can Different Interpretations Coexist?* (January 2015).

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- ²⁹ Vivek Bansal and Anshu Mittal, *Midstream: Charting a new course amid market dynamism, Decoding the O&G downturn* (April 23, 2019), <https://www2.deloitte.com/insights/us/en/industry/oil-and-gas/decoding-oil-gas-downturn/midstream-pipeline-infrastructure-transportation.html>.
- ³⁰ The Wall Street Journal, *The U.S. Is Overflowing With Natural Gas. Not Everyone Can Get It* (July 8, 2019), <https://www.wsj.com/articles/the-u-s-is-overflowing-with-natural-gas-not-everyone-can-get-it-11562518355/>.
- ³¹ *The Role of the SEC*, <https://www.investor.gov/introduction-investing/basics/role-sec> (accessed June 20, 2019).
- ³² Jay Clayton, Chairman, U.S. Securities and Exchange Commission, *Remarks on Capital Formation at the Nashville 36/86 Entrepreneurship Festival* (Aug. 29, 2018).
- ³³ Securities and Exchange Commission, *Modernization of Oil and Gas Reporting Requirements; Proposed Rule*, *supra* note 23.
- ³⁴ See, e.g., *Letter from TOTAL S.A.* (Sept. 5, 2008), <https://www.sec.gov/comments/s7-15-08/s71508-31.pdf>.
- ³⁵ *Letter from Shell International B.V.* (Sept. 8, 2008), <https://www.sec.gov/comments/s7-15-08/s71508-38.pdf>.
- ³⁶ *Letter from Shell International B.V.* (Sept. 8, 2008), <https://www.sec.gov/comments/s7-15-08/s71508-38.pdf>.
- ³⁷ See U.S. Energy Information Administration, *Weekly U.S. Field Production of Crude Oil*, <https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=WCRFPUS2&f=W>.
- ³⁸ U.S. Energy Information Administration, *U.S. Dry Natural Gas Production*, *supra* note 1.
- ³⁹ See Baker Hughes, *North America Rotary Rig Count* (Jan 2000 – Current) (Feb. 23, 2018), <http://phx.corporate-ir.net/phoenix.zhtml?c=79687&p=irol-reports&other>.