

Congressional Proposed Oil Valuation Rule Briefings

On September 2, 2003, at the request of Congresswoman Maloney (D-NY), Lucy Querques Denett, Associate Director of the Minerals Revenue Management Program, provided a briefing to the congresswoman's staff, Ben Chavet, Jennifer Keaton, Randolph Harrison of Congresswoman Capp's office, Ben Winburn of the House Resources Energy and Mineral Resources Subcommittee, Kathy Seddon of the Senate Government Affairs Committee (Minority Staff) and the General Accounting Office representative on the MMS Proposed Federal Oil Valuation Rule. Also in attendance from MMS were Richard Adamski, Anita Gonzales-Evans, and Wendy Fink of the Department's Congressional and Legislative Affairs Office.

The following issues and questions were raised:

- (1) Why is MMS changing from an index spot price to NYMEX?
- (2) Why did MMS issue the proposed rule August 20 knowing Congress was on recess.
 - (2) a. Why only a 30-day comment period?
- (3) Interest was expressed on the status of the letter Dave Freudenthal, Governor of Wyoming, which was forwarded to the Director by congressional members.
- (4) Why is MMS proposing this change?
- (5) Interest was expressed on the completion of the 1999 and 2000 audits.
- (6) Concerns were raised about changing the valuation basis for transactions not at arm's length from spot to NYMEX prices adjusted for locality and quality differentials particularly from California.
- (7) Interest was expressed on why MMS is proposing to change the rate of return allowed for transportation costs from 1.0 to 1.5 times the Standard and Poor's BBB rate.
- (8) Why did MMS assume in its calculations that oil pipeline losses in non-arm's-length transactions are 0.2 percent of the volume of the production?
- (9) Clarification on the definition of "line fill" was requested.

(10) Why does the “Summary of Costs and Royalty Impacts” chart in the preamble to the proposed Federal Oil Rule have ranges when the revenue impacts regarding the 2000 Federal Oil Rule did not?

On September 3, 2003, Lucy Querques Denett briefed Deborah Lanzone and Ben Winburn of the House Resources Subcommittee on Energy and Mineral Resources (Minority staff). Also in attendance were Richard Adamski and Anita Gonzales-Evans of MMS.

The following issues and questions were raised:

- (1) Why is MMS proposing changes to the rule?**
- (2) Interest was expressed on the status of the letter Dave Freudenthal, Governor of Wyoming, which was forwarded to the Director by congressional members.**
- (3) Interest was expressed on why MMS is changing the rate of return allowed for transportation costs from 1.0 to 1.5 times the Standard and Poor’s BBB rate.**
- (4) Why does the “Summary of Costs and Royalty Impacts” chart in the preamble to the proposed Federal Oil Rule have ranges when the revenue impacts regarding the 2000 Federal Oil Rule did not?**
- (5) Concerns were raised regarding the duty to market. Reference was made to backdoor encroachment which would allow industry to take more deductions.**
- (6) Clarifications on the definition of “line fill” was requested.**
- (7) Does MMS incur cost for “line loss” and “line fill.”**
- (8) Questions were asked regarding the 2000 Federal Oil Rule lawsuit, IPAA vs. BACA; interest was expressed on the status of litigation.**

On September 8, at the request of Patty Beneke of the Senate Energy and Natural Resources Committee minority staff, Lucy Querques Denett provided a briefing for the Democratic and Republican committee staff. The following staff attended: Patty Beneke, committee minority staff, Scott Miller, committee minority staff, Laura Cimo, Senator Boxer (D)-CA), Michael Buchwald, Senator Feinstein (D-CA), Michael Zeitler, Senator Murkowski (R-AK), Kathryn Seddona of the Senate Government Affairs Committee minority staff. Also, in attendance were Richard Adamski and Anita Gonzales-Evans of MMS

and Wendy Fink of the Department's Congressional and Legislative Affairs Office.

The following issues and questions were raised:

- (1) Interest was expressed on why MMS is proposing to change the rate of return allowed for transportation costs from 1.0 to 1.5 time the Standard and Poor's BBB rate.
- (2) With MMS moving from spot prices to NYMEX, was that a career staffer decision?
- (3) Did the states and industry ask for the change?
- (4) What is line loss?
- (5) Concerns were raised about changing the valuation basis for transactions not at arm's length from spot to NYMEX prices adjusted for locality and quality differentials particularly from California.
- (6) Has MMS done any revenue estimates?
- (7) Is NYMEX appropriate for gas?
- (8) Did the states participate in the workshops?
- (9) Why didn't MMS wait for experience under the 2000 oil rule before proposing changes?

Proposed Federal Oil Valuation Regulation

Briefing for
Congressional Staff
September 2003



Background

- MMS published the Proposed Federal Oil Rule in the Federal Register on August 20, 2003.
- The proposed rule has a 30-day comment period ending on September 19.



Proposed Rule

Valuation

- The valuation procedures for oil sold under arm's-length contracts would not change.
- The proposed rule maintains the same geographic breakdown: California/Alaska, the Rocky Mountain Region, and the Rest of the Country.
- Lessees who sell their oil to an affiliate would continue to have the option to elect, for a 2-year period, to value their oil based on either (1) their affiliate's arm's-length resale price or (2) an index price for Calif. and the Rest of the Country and a benchmark value for the Rockies.



Proposed Rule

Index Prices for Federal Oil

- MMS is proposing to change the index price from a published trade month spot price to a NYMEX calendar month price.

Advantages to using NYMEX

- Difficult for any one entity to manipulate resultant price.
- NYMEX price is available from any number of sources.
- MMS comparisons using reported royalty data demonstrated that calendar-month NYMEX prices have the highest correlation to reported arm's-length sales values of any publicly-available indices.



Proposed Rule

Index Prices for Federal Oil

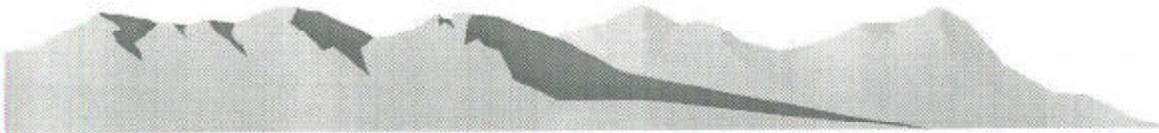
- MMS would apply a “roll” to the initial NYMEX oil prices from leases in the Gulf of Mexico and the mid-continent, including the Permian Basin.
- California, Alaska, and the Rocky Mountain Region, would not use the “roll”.
- The “roll” is a commonly used measure of the trend of NYMEX prices for future deliveries.



Proposed Rule

Location and Quality Differentials

- Under the 2000 rule, index prices are adjusted to determine the value of production at the lease through location and quality differentials and deduction of actual transportation costs.
- Adopting the NYMEX price as the basis for royalty valuation requires an additional adjustment beyond those in the current rule because the NYMEX price is defined only at Cushing, Oklahoma, for light sweet crude oil. Therefore, differentials from Cushing to market centers other than Cushing are necessary.
- MMS proposes to allow the use of published differentials when lessees do not exchange to Cushing.



Proposed Rule

Location and Quality Differentials

- Rocky Mountains - MMS is proposing to use published location/quality differentials between Cushing and Guernsey, WY for lessees with sweet crude oil production who don't have their own location/quality differentials.
- California and Alaska - MMS is proposing to use published location/quality differentials between Cushing and Line 63 and Cushing and Kern River for lessees who don't have their own location/quality differentials.



Proposed Rule

Transportation Costs

Rate of Return:

- The current rule allows companies that own pipelines to deduct their actual costs of transportation including depreciation plus a rate of return on undepreciated capital investment.
- The rate of return allowed is the Standard & Poor's BBB bond rate.



Proposed Rule

Transportation Costs

Rate of Return:

- MMS is proposing to increase the rate of return from 1 times the Standard and Poor's BBB Industrial Bond rate to 1.5 times that rate to better reflect industry's actual weighted average cost of capital.
- An API study concluded that the cost of capital (after taxes) was closer to 1.6 to 1.8 times BBB. Using research from the Energy Information Administration and Ibbotson, MMS, OMM, concluded that the rate of return that most likely would be appropriate for pipelines would be 1.3 times the S&P BBB bond rate.



Proposed Rule

Transportation Costs

- MMS is proposing to clarify specific types of costs incurred in moving oil that would be identified as allowable or not allowable for royalty deduction purposes.
- The determining factor is whether each such cost is a real cost of transporting the oil or is either a cost of marketing or not directly related to the transportation function.
- The proposed rule specifies allowable and non-allowable costs for both arm's-length and non-arm's-length transportation.



Proposed Rule

Examples of Allowable Costs for Arm's-length Transportation

- Fees paid (either in volume or in value) for actual or theoretical line losses.
- Fees paid to a pipeline owner for administration of a quality bank.
- The cost of carrying on a company's books as inventory a volume of oil that the pipeline operator requires the company to maintain in the line as line fill.
- Fees paid to a terminal operator for loading and unloading of crude oil into or from a vessel, vehicle, pipeline, or other conveyance.



Proposed Rule

Examples of Non-allowable Costs for Arm's-length Transportation

- Title and terminal transfer fees.
- Fees paid to track and match receipts and deliveries at a market center or to avoid paying title transfer fees.
- Fees paid to brokers.
- Fees paid to scheduling service providers.
- Internal costs, including salaries and related costs, rent/space costs, office equipment costs, legal fees, and other costs to schedule, nominate, and account for sale or movement of production.



Proposed Rule

Examples of Allowable Costs for Non-arm's-length Transportation

- Volumetric adjustments for actual line losses.
- The cost of carrying on your books as inventory a volume of oil that the pipeline operator requires you to maintain in the line as line fill.
- Fees paid to a terminal operator for loading and unloading of crude oil into or from a vessel, vehicle, pipeline, or other conveyance.
- Transfer fees paid to a hub operator associated with physical movement of crude oil through the hub when you do not sell the oil at the hub. These fees do not include title transfer fees.
- Payments for a volumetric deduction to cover shrinkage when high-gravity petroleum (generally in excess of 51 degrees API) is mixed with lower-gravity crude oil for transportation.



Proposed Rule

Examples of Non-allowable Costs for Non-arm's-length Transportation

- Fees paid (either in volume or in value) for theoretical line losses.
- Fees paid for long-term storage (more than 30 days).
- Fees paid for short-term storage (30 days or less) incidental to transportation as required by a transporter.
- Internal costs, including salaries and related costs, rent/space costs, office equipment costs, legal fees, and other costs to schedule, nominate, and account for sale or movement of production.



Proposed Rule

Joint Operating Agreements

- A statement in the preamble of the 2000 oil rule may have caused confusion that led people to presume that all joint operating agreement transactions are non-arm's-length and are not sales. Under the proposed rule, MMS will examine each case on its facts just as it does any other disposition of production.



Economic Analysis

Rest of the Country (Mid-Con and Gulf of Mexico)

- For the period April 2000 through December 2002, the adjusted average monthly NYMEX price with the roll exceeded the monthly average spot prices by about \$0.31 per barrel.
- We estimate increased costs to industry in the form of higher royalty payments of about \$4.3 million to \$11.6 million per year.



Economic Analysis

California and Alaska

- Applying the NYMEX price with appropriate differentials, but without the “roll” could result in a \$1.00 per barrel increase or decrease in royalties. This range results because the location and quality adjustments can vary significantly.
- We estimate a range of about -\$2.1 million to +\$2.1 million per year in terms of increased costs or benefits to industry in the form of higher or lower royalty payments.



Economic Analysis

Rocky Mountain Region

- Applying the adjusted NYMEX price, without the roll, exceeded the monthly average spot price by about \$0.02 per barrel over the entire period January 1999 through December 2002.
- We estimate increased costs to industry in the form of higher royalty payments of about \$11,700 per year.



Economic Analysis

Transportation Costs

- We estimate that increasing the basis for the rate of return by 50 percent could result in additional allowance deductions of \$3,780,283, the majority of which would be from offshore royalties.
- We have estimated that between \$4,666,363 and \$10,180,195 in additional transportation allowances may be deducted from Federal royalties.
- We believe that the burden will fall principally on states that share in Federal Royalties under section 8(g) of the OCS Lands Act. There may, however, also be minimal increases in transportation deductions taken against onshore Federal oil production.



CLARIFICATION OF ALLOWABLE AND NONALLOWABLE COSTS FOR BRIEFING ON PROPOSED FEDERAL OIL RULE

For clarification, specific types of costs incurred in moving oil would be identified in the rule as allowable or not allowable for royalty deduction purposes. The determining factor is whether each such cost is a real cost of transporting the oil or is either a cost of marketing or not directly related to the transportation function.

Allowable Costs Under An Arm's-length Transportation Contract

- (1) The amount that you pay under your arm's-length transportation contract or tariff.
- (2) Fees paid (either in volume or in value) for actual or theoretical line losses.
- * (3) Fees paid to a pipeline owner for administration of a quality bank.
- * (4) The cost of carrying on your books as inventory a volume of oil that the pipeline operator requires you to maintain in the line as line fill.
- (5) Fees paid to a terminal operator for loading and unloading of crude oil into or from a vessel, vehicle, pipeline, or other conveyance.
- (6) Fees paid for short-term storage (30 days or less) incidental to transportation as required by a transporter.
- (7) Fees paid to pump oil to another carrier's system or vehicles as required under a tariff.
- (8) Transfer fees paid to a hub operator associated with physical movement of crude oil through the hub when you do not sell the oil at the hub. These fees do not include title transfer fees.
- (9) Payments for a volumetric deduction to cover shrinkage when high-gravity petroleum (generally in excess of 51 degrees API) is mixed with lower-gravity crude oil for transportation.
- * (10) Costs of securing a letter of credit that the pipeline requires a shipper to maintain.

Non-allowable Costs Under an Arm's-length Transportation Contract

- (1) Fees paid for long-term storage (more than 30 days).
- (2) Administrative, handling, and accounting fees associated with terminalling.
- (3) Title and terminal transfer fees.
- (4) Fees paid to track and match receipts and deliveries at a market center or to avoid paying title transfer fees.
- (5) Fees paid to brokers.
- (6) Fees paid to scheduling service providers.
- (7) Internal costs, including salaries and related costs, rent/space costs, office equipment costs, legal fees, and other costs to schedule, nominate, and account for sale or movement of production.
- (8) Gauging fees.

Allowable Costs Under a Non-arm's-length Transportation Contract

- * (1) Volumetric adjustments for actual line losses.
- * (2) The cost of carrying on your books as inventory a volume of oil that the pipeline operator requires you to maintain in the line as line fill.
- * (3) Changing the rate of return from 1.0 times the Standard & Poor's BBB bond rate to 1.5 times the Standard & Poor's BBB bond rate.
- (4) Fees paid to a terminal operator for loading and unloading of crude oil into or from a vessel, vehicle, pipeline, or other conveyance.
- (5) Transfer fees paid to a hub operator associated with physical movement of crude oil through the hub when you do not sell the oil at the hub. These fees do not include title transfer fees.
- (6) Payments for a volumetric deduction to cover shrinkage when high-gravity petroleum (generally in excess of 51 degrees API) is mixed with lower-gravity crude oil for transportation.

Non-Allowable Costs Under a Non-arm's-length Transportation Contract

- (1) Fees paid (either in volume or in value) for theoretical line losses.
- (2) Fees paid to a pipeline owner for administration of a quality bank.
- (3) Fees paid for long-term storage (more than 30 days).
- (4) Fees paid for short-term storage (30 days or less) incidental to transportation as required by a transporter.
- (5) Fees paid to pump oil to another carrier's system or vehicles as required under a tariff.
- (6) Costs of securing a letter of credit that the pipeline requires a shipper to maintain.
- (7) Administrative, handling, and accounting fees associated with terminalling.
- (9) Title and terminal transfer fees.
- (10) Fees paid to track and match receipts and deliveries at a market center or to avoid paying title transfer fees.
- (11) Fees paid to brokers
- (12) Fees paid to scheduling service providers.
- (13) Internal costs, including salaries and related costs, rent/space costs, office equipment costs, legal fees, and other costs to schedule, nominate, and account for sale or movement of production.
- (14) Gauging fees.

* Denotes transportation costs that MMS is proposing to allow in the August 20, 2003, Proposed Federal Oil Rule that are not currently allowed under the 2000 Federal Oil Regulations.

Proposed Rule

Explanation of the Roll

- Due to the fact that the NYMEX prices are future price estimates, and therefore inherently reflect increases or decreases in prices based upon expected trends, an adjustment to such estimates is necessary to extrapolate back to current price estimates, upon which royalty calculations are based.



Proposed Rule

Explanation of the Roll (cont.)

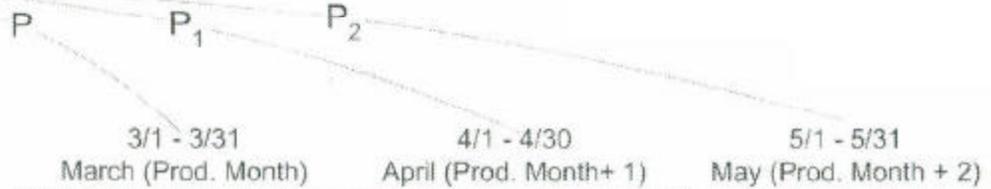
- This adjustment factor is the “roll,” which is added to the initial NYMEX price when the market is falling (to correct for the fact that the current price should be higher than the future price in a falling market) and subtracted from the initial NYMEX prices when the market is rising (to correct for the fact that the current price should be lower than the future price if the market is rising).



1/22 - 2/20
Trading Month for
March Prompt



1/22 2/20



**NYMEX Prices
Published in
Trading Month
Used for Roll**

| | | | | | |
|---------------------------------------|---------------------------------|---------------------|--|---------------------|--|
| $P = \$28.00/bbl$ | | $P_1 = \$27.70/bbl$ | | $P_2 = \$27.10/bbl$ | |
| 3/1 - 3/20 NYMEX April Delivery | 3/22 - 3/31 NYMEX May Del | | | | |

3/1 5/31

**NYMEX Prices
Published in March
are the base
NYMEX Price**

Royalty Value for March 2003 = \$28.50/bbl

| | | | | |
|-------------|---------|-------------|--------------------|---------------|
| $P =$ | \$28.00 | | | |
| $P_1 =$ | \$27.70 | $P - P_1 =$ | \$0.30 times 2/3 = | \$0.20 |
| $P_2 =$ | \$27.10 | $P - P_2 =$ | \$0.90 times 1/3 = | \$0.30 |
| Roll | | | | \$0.50 |

Calculation of Roll
Figure 1

EXPLANATION OF THE ROLL FOR BRIEFING ON PROPOSED FEDERAL OIL RULE

The Roll

- The “roll” is a measure of the trend of NYMEX prices for future deliveries. Prices reported for futures contracts on the NYMEX are not limited to deliveries in the next month. Rather, trades could be made in March 2003 for deliveries in April 2003 or in subsequent months.
- The “roll” is designed to limit the exposure of current royalty value to the vagaries of the trends reflected in the NYMEX futures prices and to minimize the current effect of the economic uncertainty inherent in the futures prices.
- The roll would be added to the NYMEX price used as the basis for royalty valuation, except for leases in California, Alaska, and the Rocky Mountain Region. The reason for this limitation is industry’s representation at the workshops that industry uses the roll primarily for Gulf of Mexico production, and does not use it in California, Alaska, or the Rocky Mountain Region. The roll may be a positive or a negative number, depending on whether the futures market is falling or rising.
- MMS is proposing to retain the right to terminate use of the roll if we determine that use of the roll no longer reflects prevailing industry practice in crude oil sales contracts.

Formula for the Roll

The roll looks to the price trends for 2 months beyond the prompt month (used in the roll calculation described below, and that is not the same as the prompt month used to determine the initial NYMEX price) and assigns a progressively smaller weight to the second and third months. Specifically, the roll is calculated as follows:

$$\text{Roll} = .6667 \times (P - P_1) + .3333 \times (P - P_2), \text{ where}$$

- P = the average of the daily NYMEX settlement prices for deliveries during the prompt month that is the same as the month of production, as published for each day during the trading month for which the month of production is the prompt month.
- P_1 = the average of the daily NYMEX settlement prices for deliveries during the month following the month of production, as published for each day during the trading month for which the month of production is the prompt month.
- P_2 = the average of the daily NYMEX settlement prices for deliveries during the second month following the month of production, as published for each day during the trading month for which the month of production is the prompt month.

Example

- Assume that the month of production for which you must determine royalty value is March 2003. March was the prompt month on the NYMEX (for year 2003) from January 22 through February 20.
- April is the first month following the month of production, and May is the second month following the month of production
- P is the average of the daily NYMEX settlement prices for deliveries during March published for each business day between January 22 and February 20 (the trading month).
- P₁ is the average of the daily NYMEX settlement prices for deliveries during April published for each business day during the same trading month (*i.e.*, between January 22 and February 20).
- Similarly, P₂ is the average of the daily NYMEX settlement prices for deliveries during May published for each business day during the same trading month used for P and P₁.

In this example, assume that P = \$28.00 per bbl, P₁ = \$27.70 per bbl, and P₂ = \$27.10 per bbl.

In this declining market, the roll = .6667 x (\$28.00 - \$27.70) + .3333 x (\$28.00 - 27.10) = \$.20 + \$.30 = \$.50.

Fifty cents per barrel would then be added to the average of the daily NYMEX settlement prices used as the basis for royalty valuation.

In this example, the roll reflects that since the market was falling, prices that traders anticipate during the trading month (March) for deliveries in a future prompt month are lower than the prices at which oil actually is selling during March. The roll accounts for that expectation. The roll will have the opposite effect in a rising market. The roll will be a subtraction from the base NYMEX price calculation (adding a negative number to the NYMEX price) because traders have a tendency to anticipate higher prices for the future prompt months than actually are occurring during the calendar month of production.

Plain English Explanation

- Due to fact that the NYMEX prices are future price estimates, and therefore inherently reflect increases or decreases in prices based upon expected trends, an adjustment to such estimates is necessary to extrapolate back to current price estimates, upon which royalty calculations are based.
- This adjustment factor is the "roll," which is added to the initial NYMEX price when the market is falling (to correct for the fact that the current price should be higher than the future price in a falling market) and subtracted from the initial NYMEX prices

when the market is rising (to correct for the fact that the current price should be lower than the future price if the market is rising).