CONCEPT PAPER FOR THE INDIAN OIL VALUATION NEGOTIATED RULEMAKING COMMITTEE

Index Price Methodology Based on NYMEX Calendar Month Average (CMA), Adjusted For the Roll (if applicable), Adjusted to the Nearest Market Center With Like-Quality Crude, Less a Fixed Location and Quality Differential.

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Concept

Consistent with Indian lease terms, value would be based on the highest price paid or offered at the time of production for the major portion of the oil of the same gravity produced and sold from the field where the leased lands are situated:

- A NYMEX-based index price, adjusted for the roll (if applicable), and adjusted for the published grade differential to the nearest market center with like-quality crude, and adjusted for a fixed differential from the market center to the field**.

By the 3rd working day of each month, ONRR would calculate and publish a field price based on:

- A NYMEX CMA price at Cushing, adjusted for the roll (if applicable), and adjusted for the high of the range for the published trade month grade differential for the nearest market center with like-quality crude, and adjusted for a fixed location and quality differential to the field.

Each month, the lessee would report the NYMEX-based index price.

**Note that associating a lease with a field may be accomplished with a one-time set-up.

Example of Major Portion Calculation

Assume for field A that ONRR would calculate a major portion price at the 50th percentile plus one barrel (starting at the bottom) for each month in 2007 thru 2010 using lessees' reported gross proceeds. Specifically, ONRR would:

- Calculate the unit price net of any transportation reported for each royalty line each month.
- Array all royalty lines for each month from highest price (starting at the top) to lowest price (at the bottom) along with the associated sales volume.
- Start from the bottom, and sum the sales volumes until the 50th percentile by volume is reached, and determine the unit price associated with the 50th percentile plus one barrel for that field for each month.

January 2010 Major Portion Calculation

Sales Volume	Sales Value - Transportation	Price	% of Total Volume
250 bbls	$19,062.50	$76.25	100.00%
150 bbls	$11,325.00	$75.50	85.51%
125 bbls	$9,375.00	$75.00	76.81%
175 bbls	$13,125.00	$75.00	69.57%
300 bbls	$22,500.00	$75.00	59.42%
110 bbls	$8,222.50	$74.75	42.03%
225 bbls	$16,762.50	$74.50	35.65%
100 bbls	$7,450.00	$74.50	22.61%
200 bbls	$14,850.00	$74.25	16.81%
90 bbls	$6,682.50	$74.25	5.22%
Total 1725 bbls			

Applying the Average Differential for CY 2007 thru 2010 to CY 2011 and Beyond

The calculated average differential price for 2011 and beyond is -$6.355/ barrel.

- By the 3rd business day of each month, ONRR would calculate and publish the index-based price for each field.
- In this case the 2007 thru 2010 calculated location and quality differential for field A is minus $6.355/barrel.
- The $6.355/barrel 2007 thru 2010 calculated location and quality differential would be used by lessees in 2011 and beyond.

Example of the Calculation of the Average Differential Between the Nearest Market Center Price and the Major Portion Price

Month/Year	NYMEX CMA	Published Differential to Nearest Market Center	Nearest Market Center Price	Major Portion Price at 50%+1	Differential
Jan-2010	$89.58	-$6.23	$83.35	76.17	-7.18
Feb-2010	$89.74	-$3.97	$85.77	78.32	-7.45
Mar-2010	$102.98	-$3.18	$99.80	92.11	-7.69
Apr-2010	$110.04	-$3.99	$106.05	100.48	-5.57
May-2010	$101.36	-$4.27	$97.09	90.73	-6.36
Jun-2010	$96.29	-$1.95	$94.34	89.55	-4.79
Jul-2010	$97.34	$4.38	$101.72	95.98	-5.74
Aug-2010	$86.34	$4.61	$90.95	84.78	-6.17
Sep-2010	$85.61	$6.00	$91.61	84.12	-7.49
Oct-2010	$86.43	$4.53	$90.96	84.59	-6.37
Nov-2010	$97.16	$4.48	101.64	96.45	-5.19
Dec-2010	$98.58	-$2.96	95.62	89.36	-6.26
				Avg Diff	-6.355

NYMEX-Based Index Value

Assume for January 2011:

- The NYMEX CMA for January 2011 is $88/barrel
- The Roll is minus $0.30/barrel, and is deemed applicable for field A.
- The high of the range for the published trade month grade differential between Cushing, OK and the market center that is nearest to field A with like-quality crude is minus $3/barrel.
- The average differential between the nearest market center and field A is $6.355/bbl.

For January 2011 production from field A, the lessee would report and pay royalty value based on:

- The NYMEX CMA, adjusted for the roll (deemed applicable), and adjusted for the grade differential between Cushing, OK and the market center nearest field A with like-quality crude, and adjusted for the ONRR-published differential between the nearest market center and field A equals: **$88/bbl - $0.30/bbl - $3/bbl - $6.36/bbl. = $78.34/barrel**.