Barton, Jayne

From: Kirumakki, Nagaraja
Sent: Monday, January 26, 2004 2:33 PM
To: Burhop, Shirley
Subject: FW: Examples of application of benchmarks - Gas

Attachments: sales to affiliateExamples.doc

Let me know if you cannot open this file. I can resubmit again.
Raj

-----Original Message-----
From: Kirumakki, Nagaraja
Sent: Monday, January 26, 2004 8:12 AM
To: Burhop, Shirley
Subject: Examples of application of benchmarks - Gas

Let me know what do you think?
If necessary we can convert some of the examples to Exercises.

sales to
'filiateExamples.doc.

I am free today to work on this.

If you think these examples give the trainees ideas on how to apply the benchmarks, then we may not need to develop examples for oil.

Raj Kirumakki
Center for Excellence
(303) 231-3466

<u>Examples</u>

Sales to Affiliates – GAS

<u>Application of Benchmark: 1</u>.

<u>Situation I</u>. Lone Star Field.
During December 2000, KB Energy (Lessee) sells 210,000 MMBtu of gas at the lease to KB Trading Inc. at $ 4.95/MMBtu. KB Trading Inc. sells the gas to Blue Sky Gas Co. in the same field at $ 5.27/MMBtu.
Additional Information: KB energy's A/L contracts in the same field. All gas is like quality.

Seller	MMBtu/Term	Contract	Price ($/MMBtu)
Sun Energy	325,000 5 yr	AL	$ 4.99
Northern Gas	250,000 5 yr	AL	$ 5.19
Star Energy	210,000 Monthly	AL	$ 4.95
Renewable Energy	215,000 5 yr	AL	$ 4.95

<u>Determine KB Energy's gross proceeds for royalty purpose.</u>

Solution

Application of Benchmark 1.
Situation I

There are three comparable contracts in Lone Star Field. Star Energy contract is not a comparable contract because it is a monthly contract. Sun Energy and Renewable Energy contracts are comparable contracts. KB Energy's price of \$ 4.95/MMBtu is within the range of the gross proceeds derived from comparable contracts. However the most comparable contract is Renewable Energy's contract because of term and the price. KB Energy's price of \$ 4.95/MMBtu is equivalent to the price paid under Renewable Energy's contract. Therefore, KB Energy's gross proceeds based on \$ 4.95/MMBtu are acceptable for value under benchmark 1.

Gross Proceeds = 210,000 x \$ 4.95 = **\$ 1,039,500.**.

Application of Benchmark I

Situation II.

During December 2000, KB Energy (Lessee) sells 210,000 MMBtu of gas to R & R Interstate Gas Co under a spot sales contract from Buck Draw field. Sales point: KB Energy's pipeline interconnect at Buck Draw field, Western Colorado..
In the same field Premium Gas Co. sells 240,000 MMBtu of gas to R & R Interstate Gas Co. under a spot sales contract. Sales point is Premium Gas's pipeline interconnect in the same field.

Price: Westernstate Pipeline's price for deliveries to pipelines in Western Colorado.
Contract for both sellers effective 6/1/2000 through 5/31/2001.

Assignment:
Determine the gross proceeds accruing to KB Energy.

Solution
Application of Benchmark I

Situation II

The most comparable contract is Premium Gas Co's contract.

KB Energy's price is equivalent to the price paid under Premium Gas Co's contract. Therefore, Premium Gas Co's gross proceeds based on its NAL contract is acceptable for computing gross proceeds.

Note: KB Energy may deduct transportation allowance from the value for the costs of moving the gas from the lease to the sales point.

Application of Benchmark I

Situation III.

Brite Star Field

During February 2003, KB Petroleum sold 50,000 MMBtu of gas to KB Refining Co. under a non-A/L contract. The contract term: 1/1/03 through 12/31/03. Price term: Index price for spot gas delivered in SW Wyoming as reported in the first posting of each month of Inside FERC's Gas Market Report for Trunkline Pipeline plus $0.07 per MMBtu.

All gas is like quality.

KB Refining also purchases all gas at AL from other producers in the Brite Star Field for its Cheyenne, Wyoming refinery. Price term is Index price for spot gas delivered in SW Wyoming as reported in the first posting of each month of Inside FERC's Gas Market Report for Trunkline Pipeline plus $0.07 per MMBtu.

Application of Benchmark I

Solution:

Situation III

KB Petroleum's price under its NAL contract is equivalent to the price paid under other AL contracts from the Brite Star field. Therefore, KB Petroluem's gross proceeds based on its NAL contract are acceptable under benchmark 1.

Application of Benchmark: 2.

Situation I.

Bronco Field

During January 2001 Premium Gas Corp sells 5,000 MMBtu of like quality gas at the well head to Premium Gas Trading Corp. Details are:

Seller	Volume/Term		Contract	Price ($/MMBtu)
RR Energy	7,500	Spot	AL	$ 2.95
Quality Gas	8,900	6 yr	AL	$ 5.65
Premium Gas Corp	5,000	1 yr	NAL	$ 3.95
JR Gas Co.	5,000	1 yr	AL	$ 5.68
Rich Gas	9,000	7 yr	AL	$ 5.67

How do you go about valuing Premium Gas Corp production?

Application of Benchmark II

Solution:
Situation I

Premium Gas Corp's gross proceeds based on $ 3.95/MMBtu are far less than the gross proceeds under AL contracts in the field. That is Premium Gas Corp's price is not equivalent to prices under comparable AL contracts. Therefore go to benchmark 2. Under the second benchmark, Premium Gas Corp must consider using price from a comparable AL contract in the Bronco field.

The most comparable contract in the filed is JR Gas Co. contract and Premium Gas Corp must use this contract to value its gas under benchmark 2.

Gross Proceeds = 5,000 MMBtu x $ 5.68 = $ 28,400.

Application of Benchmark II

Situation II

Pure Gas Field

During May 2002, Pure Gas E & P Inc. sold 10,000 Mcf of gas to Pure Gas Marketing & Trading Inc. at the wellhead. In turn Pure Gas Marketing and & Trading Inc. resold to Green River Gas Co. Details are:

Seller	Volume	Btu	NGL %	Contract	Price($/MMBtu)
AAA Gas Co.	200,000	1281	20.26	A/L	$ 5.59
BBB Gas Co.	300,000	1407	28.50	A/L	$ 5.67
XYZ Gas Co.	500,000	1321	22.97	A/L	$ 5.66
Pure Gas E&P	10,000	1033	2.53	N-A/L	$ 4.18
Pure Gas M & T*	10,000	1033	2.53	A/L	$ 4.33
Spot Gas Purchasing	95,000	1100	11.97	Spot	$ 4.66

* Pure Gas M & T is not a marketing affiliate.

<u>How do you value Pure Gas E & P Production?</u>

Application of Benchmark II

Solution
Situation II

Since Pure Gas E & P's gross proceeds based on $ 4.18/MMBtu are far less than the gross proceeds under AL contracts in this field, benchmark 1 does not apply. Go to benchmark 2.

No sales of like-quality gas under A/L contracts exist in the same field or nearby fields or areas. Pure Gas E & P has the option to use Spot Gas Purchasing's price to value its production. But, Pure Gas M & T 's full resale value may be the best indicator of market value.

Gross Proceeds = 10,000 x 1.033 x 4.33 = $ 44,728.90.

Pure Gas M & T may argue that Spot Gas Purchasing's gas is not of the same quality and use the argument of salability of the lessee's gas in Pure Gas field. The method chosen should closely reflect the circumstances surrounding the disposition of the Pure Gas E & P's production.

Application of Benchmark III

Under this benchmark a net-back method or any other reasonable method is applied for valuing processed gas or gas plant products.

Barton, Jayne

From: Kirumakki, Nagaraja
Sent: Monday, January 26, 2004 3:57 PM
To: Burhop, Shirley
Subject: RE: sales to affiliateExamples.doc

Sounds good. Let me know if you want to work on the examples first or after I am done with "supplemental audit program". Either way is fine with me. See you tomorrow.
Raj

-----Original Message-----
From: Burhop, Shirley
Sent: Monday, January 26, 2004 3:24 PM
To: Kirumakki, Nagaraja
Subject: sales to affiliateExamples.doc

<< File: sales to affiliateExamples.doc >> Raj, here are my suggested changes. We can discuss.

Kirumakki, Nagaraja

From: Kirumakki, Nagaraja
Sent: Wednesday, January 28, 2004 12:58 PM
To: Burhop, Shirley
Subject: Sales to affiliate examples

Shirley,
I incorporated *most* of your comments. Example 5 does not contradict FINA decision because it is a situation where no comparable AL contract exists in the field or area. Thus we *cannot apply* benchmark 1. We can apply benchmark 2 under the criteria of "Prices received under spot sale of gas".
However the company may apply its affiliates AL resale value under the criteria of "the particular lease operation or the salability of gas".
This example 5 is controversial.
If you have any more comments let us discuss it.

sales to
'filiateExamples.doc.

Let me know. Thanks.

Raj Kirumakki
Center for Excellence
(303) 231-3466

Barton, Jayne

From: *Burhop, Shirley*
Sent: Wednesday, January 28, 2004 3:13 PM
To: Kirumakki, Nagaraja; Gibbs Tschudy, Deborah
Subject: RE: Sales to affiliate examples

Debbie: your guidance on this would be appreciated:

My understanding is that there is no way we can go after an affiliate's resale value unless it also represents comparable AL value in the field or area.

The second *benchmark does apply* if there are no comparable AL sales or purchases in the field or area. Then we must go to:
Published prices
Other reliable public sources of pricing information, or
Other information relevant to the particular lease operation or the saleability of the lessee's gas

Fina also clarified that we cannot expand the term "lessee" to mean a non-marketing affiliate of the lessee, so we can't necessarily extend the information relevant to the "saleability of the lessee's gas" to mean the affiliate's sales.

However, the 1996 guidance paper quotes *Xeno (1995)* and says "The sale price received by an affiliate of the lessee in the first arm's-length transaction is properly considered in determining the value of produced gas under the gross proceeds rule."

That's no longer true in light of Fina, is it?

-----Original Message-----
From: Kirumakki, Nagaraja
Sent: Wednesday, January 28, 2004 12:58 PM
To: Burhop, Shirley
Subject: Sales to affiliate examples

Shirley,
I incorporated most of your comments. Example 5 does not contradict FINA decision because it is a situation where no comparable AL contract exists in the field or area. Thus we cannot apply benchmark 1. We can apply benchmark 2 under the criteria of "Prices received under spot sale of gas".
However the company *may* apply its affiliates AL resale value under the criteria of "the particular lease operation or the salability of gas".
This example 5 is controversial.
If you have any more comments let us discuss it.

<< File: sales to affiliateExamples.doc >>

Let me know. Thanks.

Raj Kirumakki
Center for Excellence
(303) 231-3466

Barton, Jayne

From: Gibbs Tschudy, Deborah
Sent: Wednesday, January 28, 2004 3:33 PM
To: Burhop, Shirley; Kirumakki, Nagaraja
Subject: RE: Sales to affiliate examples

Comments in red below.

-----Original Message-----
From: Burhop, Shirley
Sent: Wednesday, January 28, 2004 3:13 PM
To: Kirumakki, Nagaraja; Gibbs Tschudy, Deborah
Subject: RE: Sales to affiliate examples

Debbie: your guidance on this would be appreciated:

My understanding is that there is no way we can go after an affiliate's resale value unless it also represents comparable AL value in the field or area. You could also go after the after the affiliate's resale value under the second benchmark.

The second benchmark does apply if there are no comparable AL sales or purchases in the field or area. Then we must go to:
The second benchmark also includes "gross proceeds under arm's-length contracts for like-quality gas in the same *field or nearby* fields or areas, posted prices for gas (I'm not aware of any of these), prices received in arm's-length spot sales of gas,..."
Published prices
Other reliable public sources of pricing information, or
Other information relevant to the particular lease operation or the saleability of the lessee's gas

Fina also clarified that we cannot expand the term "lessee" to mean a non-marketing affiliate of the lessee, so we can't necessarily extend the information relevant to the "saleability of the lessee's gas" to mean the affiliate's sales.

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That's no longer true in light of Fina, is it? That's right, Xeno is superceded by Fina.

X 5

-----Original Message-----
From: Kirumakki, Nagaraja
Sent: Wednesday, January 28, 2004 12:58 PM
To: Burhop, Shirley
Subject: Sales to affiliate examples

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However the company may apply its affiliates AL resale value under the criteria of "the particular lease operation or the salability of gas".
This example 5 is controversial.
If you have any more comments let us discuss it.

<< File: sales to affiliateExamples.doc >>

Let me know. Thanks.

Raj Kirumakki
Center for Excellence
(303) 231-3466

Barton, Jayne

From: Burhop, Shirley
Sent: Wednesday, January 28, 2004 3:54 PM
To: Gibbs Tschudy, Deborah; Kirumakki, Nagaraja
Subject: RE: Sales to affiliate examples

X 5

-----Original Message-----
From: Gibbs Tschudy, Deborah
Sent: Wednesday, January 28, 2004 3:33 PM
To: Burhop, Shirley; Kirumakki, Nagaraja
Subject: RE: Sales to affiliate examples

Comments *in red below.*

-----Original Message-----
From: Burhop, Shirley
Sent: Wednesday, January 28, 2004 3:13 PM
To: Kirumakki, Nagaraja; Gibbs Tschudy, Deborah
Subject: RE: Sales to affiliate examples

Debbie: *your guidance on this would be appreciated:*

My understanding is that there is no way we can go after an affiliate's resale value unless it also represents comparable AL value in the field or area. You could also go after the after the affiliate's resale value under the second benchmark.

The second *benchmark does apply if there are no comparable* AL sales or purchases in the field or area. Then we must go to:
The second benchmark also includes "gross proceeds under arm's-length contracts for like-quality gas in the same field or nearby fields or areas, posted prices for gas (I'm not aware of any of these), prices received in arm's-length spot sales of gas,..."
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Other reliable public sources of pricing information, or
Other information relevant to the particular lease operation or the saleability of the lessee's gas

Fina also clarified that we cannot expand the term "lessee" to mean a non-marketing affiliate of the lessee, so we can't necessarily extend the information relevant to the "saleability of the lessee's gas" to mean the affiliate's sales.

However, the 1996 guidance paper quotes *Xeno (1995)* and says "The sale price received by an affiliate of the lessee in the first arm's-length transaction is properly considered in determining the value of produced gas under the gross proceeds rule."

That's no longer true in light of Fina, is it? *That's right, Xeno is superceded by Fina.* X 5

X 5

-----Original Message-----

From: Kirumakki, Nagaraja
Sent: Wednesday, January 28, 2004 12:58 PM
To: Burhop, Shirley
Subject: Sales to affiliate examples

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However the company may apply its affiliates AL resale value under the criteria of "the particular lease operation or the salability of gas".
This example 5 is controversial.
If you have any more comments let us discuss it.

<< File: sales to affiliateExamples.doc >>

Let me know. Thanks.

Raj Kirumakki
Center for Excellence
(303) 231-3466

Barton, Jayne

From: Gibbs Tschudy, Deborah
Sent: Wednesday, January 28, 2004 4:39 PM
To: Burhop, Shirley; Kirumakki, Nagaraja
Subject: RE: *Sales to affiliate examples*

Comments in red below.

-----Original Message-----
From: Burhop, Shirley
Sent: Wednesday, January 28, 2004 3:54 PM
To: Gibbs Tschudy, Deborah; Kirumakki, Nagaraja
Subject: RE: Sales to affiliate examples

X 5

-----Original Message-----
From: Gibbs Tschudy, Deborah
Sent: Wednesday, January 28, 2004 3:33 PM
To: Burhop, Shirley; Kirumakki, Nagaraja
Subject: RE: Sales to affiliate examples

Comments in red below.

-----Original Message-----
From: Burhop, Shirley
Sent: Wednesday, January 28, 2004 3:13 PM
To: Kirumakki, Nagaraja; Gibbs Tschudy, Deborah
Subject: RE: Sales to affiliate examples

Debbie: your guidance on this would be appreciated:

My understanding is that there is no way we can go after an affiliate's resale value unless it also represents comparable AL value in the field or area. You could also go after the after the affiliate's resale value under the second benchmark.

The second benchmark does apply if there are no comparable AL sales or purchases in the field or area. Then we must go to:
The second benchmark also includes "gross proceeds under arm's-length contracts for like-quality gas in the same field or nearby fields or areas, posted prices for gas (I'm not aware of any of these), prices received in arm's-length spot sales of gas,..."
Published prices
Other reliable public sources of pricing information, or
Other information relevant to the particular lease operation or the saleability of the lessee's gas

Fina also clarified that we cannot expand the term "lessee" to mean a non-marketing affiliate of the lessee, so we can't necessarily extend the information relevant to the "saleability of the lessee's gas" to mean the affiliate's sales.

However, the 1996 guidance paper quotes *Xeno (1995)* and says "The sale price received by an affiliate of the lessee in the first arm's-length transaction is properly considered in determining the value of produced gas under the gross proceeds rule."

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X — 5

-----Original Message-----
From: Kirumakki, Nagaraja
Sent: Wednesday, January 28, 2004 12:58 PM
To: Burhop, Shirley
Subject: Sales to affiliate examples

Shirley,
I incorporated most of your comments. Example 5 does not contradict FINA decision because it is a situation where no comparable AL contract exists in the field or area. Thus we cannot apply benchmark 1. We can apply benchmark 2 under the criteria of "Prices received under spot sale of gas".
However the company may apply its affiliates AL resale value under the criteria of "the particular lease operation or the salability of gas".
This example 5 is controversial.
If you have any more comments let us discuss it.

<< File: sales to affiliateExamples.doc >>

Let me know. Thanks.

Raj Kirumakki
Center for Excellence
(303) 231-3466

Barton, Jayne

From: Kirumakki, Nagaraja
Sent: Thursday, January 29, 2004 8:11 AM
To: Burhop, Shirley
Subject: Gas Sales to affiliates - Examples

Shirley,
The example 5 closely resembles the example in the "Oil & Gas Payor Hadbook Vol. III - Product Valuation" date 8/1/00. The page number is 4-31, fig. 4-20.
Also if you refer to the same handbook page 4-22, the last sentence in the paragraph says "...Other factors, such as weighted-average prices, contractually reduced prices for transportation, or certain NAL contract prices may be used in establishing value."

I interpret this to mean, use any method that gives you a reasonable value that approximates the market value in the field or area.

Raj Kirumakki
Center for Excellence
(303) 231-3466

Kirumakki, Nagaraja

From: *Burhop, Shirley*
Sent: Thursday, January 29, 2004 9:41 AM
To: Kirumakki, Nagaraja
Subject: RE: Gas Sales to affiliates - Examples

Ok. Let's go with it.

-----Original Message-----
From: Kirumakki, Nagaraja
Sent: Thursday, January 29, 2004 8:11 AM
To: Burhop, Shirley
Subject: Gas Sales to affiliates - Examples

Shirley,
The example 5 closely resembles the example in the "Oil & Gas Payor Hadbook Vol. III - Product Valuation" date 8/1/00. The page number is 4-31, fig. 4-20.
Also if you refer to the same handbook page 4-22, the last sentence in the paragraph says "...Other factors, such as weighted-average prices, contractually reduced prices for transportation, or certain NAL contract prices may be used in establishing value."

I interpret this to mean, use any method that gives you a reasonable value that approximates the market value in the field or area.

Raj Kirumakki
Center for Excellence
(303) 231-3466

Barton, Jayne

From: Burhop, Shirley
Sent: Monday, February 02, 2004 8:55 AM
To: Conway, Karen; Kirumakki, Nagaraja
Subject: FW: Fina guidance and training

Attachments: Sales to Affiliates - draft.ppt; sales to affiliateExamples.doc; Coal examples.doc

Sales to Affiliates - draft.pp... sales to filiateExamples.doc. Coal examples.doc (45 KB)

FYI - I sent these things forward on Friday.

-----Original Message-----
From: Burhop, Shirley
Sent: Friday, January 30, 2004 4:41 PM
To: Gibbs Tschudy, Deborah
Cc: Williams, Mary
Subject: Fina guidance and training

Here's the draft guidance and training. There are 3 files: a power point presentation, gas valuation examples, and coal valuation examples.

The resource papers are not included, nor is the Case Study which is still being developed. We are also working on a sample audit program which is not yet included.

Gibbs Tschudy, Deborah

From: Gibbs Tschudy, Deborah
Sent: Tuesday, February 10, 2004 11:20 AM
To: Burhop, Shirley
Cc: Williams, Mary
Subject: RE: Fina guidance and training

sales to 'filiateExamples.doc.   Coal examples.doc (64 KB)

Hi Shirley - I finally got through the Powerpoint presentation on the plane to Houston. I will give you my comments annotated on the hard copy at the Special Institute.

My comments on the gas and coal examples are attached in redline/strikeout.

Thank you for your hard work on this. I have received a lot of positive feedback from the States and Tribes regarding your leadership of this training effort.

-----Original Message-----
From: Burhop, Shirley
Sent: Friday, January 30, 2004 4:41 PM
To: Gibbs Tschudy, Deborah
Cc: Williams, Mary
Subject: Fina guidance and training

Here's the draft guidance and training. There are 3 files: a power point presentation, gas valuation examples, and coal valuation examples.

The resource papers are not included, nor is the Case Study which is still being developed. We are also working on a sample audit program which is not yet included.

Example 1
Gas

Application of Benchmark: 1.

Situation I - Lessee's price is equivalent to prices paid under a comparable arm's-length (AL) contract. .

Lone Star Field.
During December 2000, KB Energy (Lessee) sells 210,000 MMBtu of gas at the lease under a NAL contract to KB Trading Inc. for $ 4.95/MMBtu. In turn the KB Trading Inc. sells the gas to Blue Sky Gas Co. in the same field at $ 5.27/MMBtu.
Additional Information: KB energy's A/L contracts in the same field. All gas is like quality.

Seller	MMBtu/Term		Contract	Price
($/MMBtu)				
Sun Energy	325,000	5 yr	AL	$ 4.99
Northern Gas	250,000	5 yr	AL	$ 5.19
Star Energy	210,000	Monthly	AL	$ 4.95
Renewable Energy	215,000	5 yr	AL	$ 4.95
KB Trading	210,000		AL	$5.27

What should be the value for royalty purposes?

Solution
Example 1

Application of Benchmark 1. Situation I

There are four comparable contracts in Lone Star Field. The Star Energy contract is not a comparable contract because it is a monthly contract. The Sun Energy, Renewable Energy, and KB Trading Company contracts are comparable contracts in the field or area. _The KB Energy's price of $ 4.95/MMBtu is within the range of the gross proceeds derived from or paid under comparable AL contracts.

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Therefore, KB Energy's gross proceeds based on $ 4.95/MMBtu are acceptable for value under benchmark 1.

Gross Proceeds = 210,000 x $ 4.95 = **$ 1,039,500.**.

Note* The Renewable Energy's contract is the most comparable contract because of term and the price.

Example 2
Gas

Application of Benchmark 1 [Cont'd]

Situation II: Lessee's contract meets both comparability and equivalency test.

During December 2000, KB Energy (Lessee) sells 210,000 MMBtu of gas to R & R Interstate Gas Co under a NAL spot sales contract from Buck Draw field. Sales point: KB Energy's pipeline interconnect at Buck Draw field, Western Colorado..
In the same field Premium Gas Co. sells 240,000 MMBtu of gas to R & R Interstate Gas Co. under an AL spot sales contract. Sales point is Premium Gas's pipeline interconnect in the same field.

Price: The price under both contracts is Westernstate Pipeline's price for deliveries to pipelines in Western Colorado. Both contracts are effective 6/1/2000 through 5/31/2001.

Assignment: Is the NAL price between KB and R & R an acceptable value for royalty purpose under Benchmark 1.

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Solution
Example 2

Application of Benchmark 1 - Situation II

KB Energy's price is equivalent to the price paid under Premium Gas Co's contract. Therefore, KB Energy's gross proceeds under its NAL contract represent an acceptable value for royalty purposes.

Note: KB Energy may deduct a transportation allowance from the value for the costs of moving the gas from the lease to the sales point. Premium Gas Co.'s AL contract is comparable.

Example 3
Gas

Application of Benchmark 1 (cont'd)

Situation III -_ Lessee's NAL contract is comparable to another AL contract in the filed or area.

Brite Star Field
During February 2003, KB Petroleum sold 50,000 MMBtu of gas to KB Refining Co. under a NAL contract. The contract term: 1/1/03 through 12/31/03. Price term: Index price for spot gas delivered in SW Wyoming as reported in the first of the month bid price in Inside FERC's Gas Market Report for Trunkline Pipeline plus $0.07 per MMBtu.

Deleted: posting of each month of

All gas is like quality.

KB Refining also purchases all gas at AL from other producers in the Brite Star Field for its Cheyenne, Wyoming gas processing plant. Price term is Index price for spot gas delivered in SW Wyoming as reported in the first of the month bid price of Inside FERC's Gas Market Report for Trunkline Pipeline plus $0.07 per MMBtu.

Deleted: refinery

Deleted: posting of each month

Solution
Example 3

Application of Benchmark:1

KB Petroleum's price under its NAL contract is equivalent to the price paid under other AL contracts in the Brite Star field. Therefore, KB Petroleum's gross proceeds based on its NAL contract are acceptable under benchmark 1.

Example 4
Gas

Application of Benchmark: 2
Situation I.

Premium Gas Trading Co buys like quality gas from producers in the Bronco Field under the following contacts.

Seller	Volume/Term		Contract	Price ($/MMBtu)
RR Energy	7,500	Spot	AL	$ 2.95
Quality Gas	8,900	6 yr	AL	$ 5.65
Premium Gas Co	5,000	1 yr	NAL	$ 3.95
JR Gas Co.	5,000	1 yr	AL	$ 5.68
Rich Gas	9,000	7 yr	AL	$ 5.67

How do you go about valuing Premium Gas Co production?

Solution
Example 4

Application of Benchmark: 2
Situation I - Lessee's price is not equivalent to prices under comparable AL contracts.

Premium Gas Co's gross proceeds based on $ 3.95/MMBtu are far less than the gross proceeds under AL contracts in the field. Thus, the Premium Gas Co's price is not equivalent to prices under comparable AL contracts. Benchmark 1 does not apply go to Benchmark 2. Under the second benchmark, Premium Gas Co must consider gross proceeds under AL contracts for like-quality gas in the same field (Bronco field) or area.

The most comparable contract in the filed is JR Gas Co. contract and Premium Gas Co must use this contract price to value its gas under benchmark 2.

Value = 5,000 MMBtu x $ 5.68 = $ 28,400.

Deleted: Gross Proceeds

Example 5
Gas

Application of Benchmark 2.

Situation II – No Comparable AL contract exists in the field or area, and the affiliate resells the gas.

Pure Gas Field
During May 2002, Pure Gas E & P Inc. sold 10,000 Mcf of gas to Pure Gas Marketing & Trading Inc. at the wellhead. In turn Pure Gas Marketing and & Trading Inc. resold the gas to Green River Gas Co in the same field. Additional information follows.

Seller	Volume	Btu	NGL %	Contract	Price($/MMBtu)
AAA Gas Co.	200,000	1281	20.26	AL	$ 5.59
BBB Gas Co.	300,000	1407	28.50	AL	$ 5.67
XYZ Gas Co.	500,000	1321	22.97	AL	$ 5.66
Pure Gas E&P	10,000	1033	2.53	NAL	$ 4.18
Pure Gas M & T*	10,000	1033	2.53	AL	$ 4.33
Spot Gas Purchasing	95,000	1100	11.97	Spot	$ 4.66

* Pure Gas M & T is not a marketing affiliate.

How do you value Pure Gas E & P Production?

Solution
Example 5

Application of Benchmark 2.

Since Pure Gas E & P's gross proceeds based on $ 4.18/MMBtu are far less than the gross proceeds under AL contracts in this field, benchmark 1 does not apply. Go to benchmark 2.

Pure Gas E & P may use Pure Gas M&T's arm's-length resale to Green Rver Gas to value its production under the 2nd benchmark since the sale occurs in the field or area. The price will need to be adjusted to reflect the different quality of the gas

Deleted: No sales of like-quality gas under A/L contracts exist in the same field or nearby fields or areas. ¶
¶

Deleted: Spot Gas Purchasing's price

Value = 10,000 x 1.033 x 4.66 = $ 48,137.8

Deleted: Gross Proceeds

Note:

The method chosen should closely reflect the circumstances surrounding the disposition of the Pure Gas E & P's production.

Deleted: Pure Gas M & T may argue that Spot Gas Purchasing's gas is not of the same quality and use the argument of salability of the lessee's gas in Pure Gas field. ¶

Example 6
Gas

Application of Benchmark 3

Under this benchmark a net-back method or any other reasonable method is applied for valuing processed gas or gas plant products.

- Rarely used
- Applied on a case by case basis
- Lessees must notify MMS [30 CFR 206.152 § c(3) (2000)]

Example 7
Coal

First Benchmark:

- Gross proceeds accruing under the non-arm's length contract are acceptable if:
  - the contract is comparable to arm's length contracts
  - parties to the arm's length contract are not related to the lessee
- This benchmark has rarely been used because most contracts are *confidential*

Example:

Warrington Coal produces 100,000 tons of subbituminous coal at 8,800 Btu in the Powder River Basin. They sell it to their affiliate Warrington Sales at $6.75 per ton. As this is a non-arm's length contractual arrangement, Warrington Coal must value the coal for royalty purposes using the benchmarks (criteria).

Warrington Coal somehow acquires the contract terms of coal sales in the immediate area and current sales quarter:

Clifford Coal	75,000 tons	8,850 Btu	$6.90/ton
Spencer Energy	120,000 tons	8,650 Btu	$6.63/ton
Warrington Sales	100,000 tons	8,800 Btu	$6.80/ton
Wyoming Rose	130,000 tons	8,800 Btu	$6.70/ton
M&C Coal Mining	90,000 tons	8,400 Btu	$5.60/ton

They may only use comparable contracts for comparison. (M&C Coal's Btu content is too low, and Warrington Sales is an affiliate. Neither contract price can be used for comparison.) As the remaining arm's length contracts fall in the same range as Warrington Coal's price, they may use their own non-arm's length contract price ($6.75) for royalty valuation purposes.

Example 8
Coal

Second Benchmark:

§ The price accepted or approved by the public utility commission for inclusion in the rates charged to electric power customers

§ Used only by investor-owned utilities

Example:

Sky High Mining sells coal to its affiliate power plant Sky High Electricity. The first valuation criteria cannot be used as there are no other comparable coal sales contracts in the region. Sky High may use the second criteria as their affiliate is an electric utility that reports its power generation activities to the state public utility commission (PUC).

Fuel costs are reported at least annually to a PUC and are based on the delivered costs of fuel. The price must be accepted and approved by the PUC for inclusion in the rates charged to electric power customers. If the delivered cost to the plant includes transportation or washing costs, the lessee may deduct the appropriate allowances from the reported costs.

Example 9
Coal

Third Benchmark:

- § The price of delivered coal reported to the Department of Energy, Energy Information Administration
- § FERC From 423 or Form No.1
- § Used by electric power cooperatives
- § Transportation allowances usually apply

<u>Example:</u>

Mountain Mining sells coal to its affiliate power plant Mountain Electricity. The first valuation criteria cannot be used as there are no other comparable coal sales contracts in the region. The second benchmark cannot be used as Mountain Electricity is a cooperative and doesn't report to a PUC.

However, as Mountain Electricity is large enough (with a total generation nameplate capacity of more than 50 megawatts) it must report fuel purchases to the Federal Energy Regulatory Commission (FERC). These coal costs are collected and published by the Energy Information Administration of the Department of Energy. If the delivered cost to the plant includes transportation or washing costs, the lessee may deduct the appropriate allowances from the reported costs in calculating net gross proceeds.

Example 10
Coal

Fourth Benchmark:

- § Determine the coal value taking into account spot prices or other relevant matters including circumstances unique to the mine
- § This is the benchmark most often used

Example:

Condor Mining sells 200,000 tons of subbituminous coal at 8,400 Btu to affiliate Eiffel Sales Company for $5.50 per ton. Condor cannot use the first three benchmarks as there are no comparable arm's length sales contracts in the region, and they are not selling directly to a power plant. Condor also sold tonnage to several other non-affiliated purchasers in the same quarter:

Oliver Energy	250,000 tons	$5.63/ton
Krolock Minerals Sales	125,000 tons	$5.70/ton
EFX Energy	300,000 tons	5.40/ton

The fourth benchmark does not contain any comparability criteria. It would be relevant matter under the fourth benchmark to use a weighted average of these arm's-length contracts. This example may be better if we use a situation in which there are no arm;s-length contracts and we use a Coal Daily spot price adjusted for transportation.

Deleted: If all of the comparability factors included in the first criterion are met, then under the third benchmark Condor may use a weighted average of its other sales contracts to determine an acceptable value for royalty determination, as long as it is not less than the Eiffel Sales contract price.¶
¶
((250,000)(5.63) + (125,000)(5.70) + (300,000)(5.40))/675,000 = $5.54/ton.¶
¶
However, as the Eiffel Sales price is within the range of acceptable coal prices, $5.50 may be used for royalty valuation purposes.¶

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Example 11

Coal

Fifth Benchmark:

- § A net-back or any other reasonable method
- § Calculate value by subtracting from the ultimate sale (including the sale of electricity) any cost incurred or value added to arrive at an fob mine price
- § *"The valuation procedure of last resort"*

Example:

Magda Coal sells all of its production to an electric power plant in an area where no arm's length sales are occurring from which to establish a representative value. The electric power is sold into the deregulated marketplace and therefore neither a State Public Utility Commission nor the Federal Energy Regulatory Commission would have jurisdiction on fuel prices. Under the fifth benchmark Magda Coal could establish a royalty valuation approach as the gross proceeds for the sale of electricity less the various upstream expenses involved in converting the coal Btus to megawatts of electricity.

<u>Or we could use a spot price published by Coal Daily or some other publication.</u>

Barton, Jayne

From: Kirumakki, Nagaraja
Sent: Wednesday, February 25, 2004 3:32 PM
To: Burhop, Shirley
Subject: Updated - Sales to affiliates examples

Attachments: sales to affiliateExamples.doc

sales to
'filiateExamples.doc.

Raj Kirumakki
Center for Excellence
(303) 231-3466

Sale of Unprocessed Gas under a Non-Arm's-Length (NAL) Contract

Example 1

Application of Benchmark: 1

Situation I
Lessee's price is equivalent to prices paid under a comparable arm's-length (AL) contract..

Lone Star Field.
During December 2000, KB Energy (Lessee) sells 210,000 MMBtu of gas at the lease under a NAL contract to KB Trading Inc. for $ 4.95/MMBtu. In turn the KB Trading Inc. sells the gas to Blue Sky Gas Co. in the same field at $ 5.27/MMBtu.
Additional Information: KB energy's AL contracts in the same field. All gas is like quality.

Seller	MMBtu/Term		Contract	Price ($/MMBtu)
Sun Energy	325,000	5 yr	AL	$ 4.99
Northern Gas	250,000	5 yr	AL	$ 5.19
Star Energy	210,000	monthly	AL	$ 4.95
Renewable Energy	215,000	5 yr	AL	$ 4.95
KB Trading Inc.	210,000	6 months	AL	$ 5.27

<u>What should be the value for royalty purposes?</u>

Solution

Example 1

Application of Benchmark 1.
Situation I

There are three comparable contracts in Lone Star Field. The Star Energy and KB Trading Inc. contracts are not comparable contracts because they are monthly and short term contracts respectively. The Sun Energy, the Northern Gas and the Renewable Energy contracts are comparable contracts in the field or area. The KB Energy's price of $ 4.95/MMBtu is within the range of the gross proceeds derived from or paid under comparable AL contracts.

Therefore, KB Energy's gross proceeds based on $ 4.95/MMBtu are acceptable for value under benchmark 1.

Gross Proceeds = 210,000 x $ 4.95 = **$ 1,039,500.**.

Note* The Renewable Energy's contract is the most comparable contract because of term and the price.

Example 2

Application of Benchmark 1

<u>**Situation II**</u>: Lessee's contract meets both comparability and equivalency test.

During December 2000, KB Energy (Lessee) sells 210,000 MMBtu of gas to R & R Interstate Gas Co under a NAL spot sales contract from Buck Draw field. Sales point: KB Energy's pipeline interconnect at Buck Draw field, Western Colorado..
In the same field Premium Gas Co. sells 240,000 MMBtu of gas to R & R Interstate Gas Co. under an AL spot sales contract. Sales point is Premium Gas's pipeline interconnect in the same field.

<u>Price</u>: The price under both contracts is Westernstate Pipeline's price for deliveries to pipelines in Western Colorado. Both contracts are effective 6/1/2000 through 5/31/2001.

<u>Assignment:</u> Is the NAL price between KB and R & R an acceptable value for royalty purpose under Benchmark 1.

Solution

Example 2

Application of Benchmark 1

Situation II

KB Energy's price is equivalent to the price paid under Premium Gas Co's contract. Therefore, KB Energy's gross proceeds under its NAL contract represent an acceptable value for royalty purposes.

Note: KB Energy may deduct a transportation allowance from the value for the costs of moving the gas from the lease to the sales point. Premium Gas Co.'s AL contract is comparable.

Example 3

Application of Benchmark 1

<u>Situation III</u> -_ Lessee's NAL contract is comparable to another AL contract in the filed or area.

Brite Star Field
During February 2003, KB Petroleum sold 50,000 MMBtu of gas to KB Refining Co. under a NAL contract. The contract term: 1/1/03 through 12/31/03. Price term: Index price for spot gas delivered in SW Wyoming as reported in the first monthly issue of Inside FERC's Gas Market Report for Trunkline Pipeline plus $0.07 per MMBtu.

All gas is like quality.

KB Refining also purchases all gas at AL from other producers in the Brite Star Field for its Cheyenne, Wyoming gas processing plant. Price term is Index price for spot gas delivered in SW Wyoming as reported in the first monthly issue of Inside FERC's Gas Market Report for Trunkline Pipeline plus $0.07 per MMBtu.

Example 3

Solution:

Application of Benchmark:1

Situation III

KB Petroleum's price under its NAL contract is equivalent to the price paid under other AL contracts in the Brite Star field. Therefore, KB Petroleum's gross proceeds based on its NAL contract are acceptable under benchmark 1.

Example 4

<u>Application of Benchmark: 2</u>

Situation I.

Lessee's price is not equivalent to prices under comparable AL contracts.

Premium Gas Trading Co buys like quality gas from producers in the Bronco Field under the following contacts.

Seller	Volume/Term		Contract	Price ($/MMBtu)
RR Energy	7,500	Spot	AL	$ 2.95
Quality Gas	8,900	6 yr	AL	$ 5.65
Premium Gas Co	5,000	1 yr	NAL	$ 3.95
JR Gas Co.	5,000	1 yr	AL	$ 5.68
Rich Gas	9,000	7 yr	AL	$ 5.67

How do you go about valuing Premium Gas Co production?

Solution

Example 4

Application of Benchmark: 2
Situation I
Lessee's price is not equivalent to prices under comparable AL contracts.

Premium Gas Co's gross proceeds based on $ 3.95/MMBtu are far less than the gross proceeds under AL contracts in the field. Thus, the Premium Gas Co's price is not equivalent to prices under comparable AL contracts. Benchmark 1 does not apply go to Benchmark 2. Under the second benchmark, Premium Gas Co must consider gross proceeds under AL contracts for like-quality gas in the same field (Bronco field) or area.

The most comparable contract in the filed is JR Gas Co. contract and Premium Gas Co must use this contract price to value its gas under benchmark 2.

Value = 5,000 MMBtu x $ 5.68 = $ 28,400.

Example 5

Application of Benchmark 2.

Situation II

No Comparable AL contract exists in the field or area, and the affiliate resells the gas.

Pure Gas Field

During May 2002, Pure Gas E & P Inc. sold 10,000 Mcf of gas to Pure Gas Marketing & Trading Inc. at the wellhead. In turn Pure Gas Marketing and & Trading Inc. resold the gas to Green River Gas Co in the same field. The Pure Gas M & T is not a marketing affiliate.
Additional information follows.

Seller	Volume	Btu	NGL %	Contract	Price ($/MMBtu)
AAA Gas Co.	200,000	1281	20.26	NAL	$ 5.59
BBB Gas Co.	300,000	1407	28.50	NAL	$ 5.67
XYZ Gas Co.	500,000	1321	22.97	NAL	$ 5.66
Pure Gas E&P	10,000	1033	2.53	NAL	$ 4.18
Pure Gas M & T	10,000	1033	2.53	AL	$ 4.25
Spot Gas Purchasing	95,000	1100	11.97	Spot	$ 4.66

<u>How do you value Pure Gas E & P Production?</u>

Solution

Example 5

Application of Benchmark 2.
Situation II

No sales of like-quality gas under A/L contracts exist in the same field or nearby fields or areas.

Pure Gas E & P may use Spot Gas Purchasing's price to value its production under the 2nd benchmark. The price will need to be adjusted to reflect the different quality of the gas

Value = 10,000 x 1.033 x 4.66 = $ 48,137.8

Note:
Pure Gas M & T may argue that Spot Gas Purchasing's gas is not of the same quality and use the argument of salability of the lessee's gas in Pure Gas field.

The method chosen should closely reflect the circumstances surrounding the disposition of the Pure Gas E & P's production.

Example 6

Application of Benchmark 3
Under this benchmark a net-back method or any other reasonable method is applied for valuing processed gas or gas plant products.

- Rarely used.
- Applied on a case by case basis.
- Lessees must notify MMS [30 CFR 206.152 § c(3) (2000)].
- AL contract prices in a distant field or area adjusted for quality and transportation may be used.

Barton, Jayne

From: Kirumakki, Nagaraja
Sent: Monday, March 22, 2004 11:00 AM
To: *Burhop, Shirley*
Subject: Outline for "sales to affiliates" training

Attachments: sales to affiliateExamples.doc

The two page outline is based on 86 slides that I had.

Along with the training class schedule announcement, there should be a brief statement about the course. This and the class outline should take care of Ken Vogel's concerns. And our introductory remarks and discussions should put the training class in best perspective.

sales to
'filiateExamples.doc.

Raj Kirumakki
Center for Excellence
(303) 231-3466

Outline

Sales to Affiliates: Gas, Oil & Coal

Indian Gas

Oil

[Pre June 2000 for Federal]

Federal Coal

Definitions
Application to Coal Sales
    Criteria: 1 through 5
Court Cases
Closing Remarks

Barton, Jayne

From: Burhop, Shirley
Sent: Monday, March 22, 2004 11:10 AM
To: Vogel, Kenneth; Gibbs Tschudy, Deborah
Subject: FW: Outline for "sales to affiliates" training

Attachments: sales to affiliateExamples.doc

FYI

-----Original Message-----
From: Kirumakki, Nagaraja
Sent: Monday, March 22, 2004 11:00 AM
To: Burhop, Shirley
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sales to
filiateExamples.doc.

Raj Kirumakki
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(303) 231-3466

Barton, Jayne

From: Kirumakki, Nagaraja
Sent: Friday, May 07, 2004 9:25 AM
To: Burhop, Shirley
Subject: Gas Sales to affiliates revised examples.

Attachments: sales to affiliateExamples.doc

Shirley,
I have revised the examples, added explanation. In other words, I have made it more reader friendly. Hope this will help.

sales to
'filiateExamples.doc.

Raj Kirumakki
(303) 231-3466

Sale of Unprocessed Gas under a Non-Arm's-Length (NAL) Contract

Example 1

Application of Benchmark: 1

Situation I
Valuation of unprocessed gas where lessee's price is equivalent to prices paid under a comparable arm's-length (AL) contract. .

Lone Star Field.
During December 2000, KB Energy (Lessee) sells 210,000 MMBtu of gas at the lease under a 5 year NAL contract to KB Trading Inc. for $ 4.95/MMBtu. In turn the KB Trading Inc. sells the gas to Blue Sky Gas Co. in the same (Lone Star) field at $ 5.27/MMBtu.
All gas is like-quality and all other comparability factors are identical.

Seller	MMBtu/Term		Contract	Price ($/MMBtu)
Sun Energy	325,000	5 yr	AL	$ 4.99
Northern Gas	250,000	5 yr	AL	$ 5.19
Star Energy	210,000	monthly	AL	$ 4.95
Renewable Energy	215,000	5 yr	AL	$ 4.95
KB Trading Inc.	210,000	6 months	AL	$ 5.27

What should be the value for royalty purposes?

Solution

Example 1

Application of Benchmark 1.
Situation I

Benchmark 1 applies as there are three comparable contracts in Lone Star Field. The Star Energy and KB Trading Inc. contracts are not comparable contracts because they are monthly and short term contracts respectively. The Sun Energy, the Northern Gas and the Renewable Energy contracts are comparable contracts in this field. The KB Energy's price of $ 4.95/MMBtu is within the range of the gross proceeds derived from or paid under comparable AL contracts.

Therefore, KB Energy's gross proceeds based on $ 4.95/MMBtu are acceptable for value under benchmark 1.

Gross Proceeds = 210,000 x $ 4.95 = **$ 1,039,500..**

Example 2

Application of Benchmark 1

<u>Situation II</u>:
Valuation of unprocessed gas under benchmark 1 where lessee's contract is comparable to another Arm's-length contract in the field.

During December 2001, KB Energy (Lessee) sells 210,000 MMBtu of gas to R & R Interstate Gas Co under a NAL 5 year term contract from Buck Draw field. Sales point: KB Energy's pipeline interconnect at Buck Draw field, Western Colorado. The contract is effective 1/1/2000.

In the same field Premium Gas Co. also sells 240,000 MMBtu of gas to R & R Interstate Gas Co. under an AL 5 year term contract. Sales point is Premium Gas's pipeline interconnect in the same field (Buck Draw). The contract is effective 3/1/2000.

<u>Price</u>: The price under both contracts is Westernstate Pipeline's price for deliveries to pipelines in Western Colorado. Both contracts are effective 6/1/2000 through 5/31/2001.

Like quality gas is sold under both KB Energy's NAL and Premium Gas' AL sales contracts in the same market.

<u>Assignment:</u> Is the NAL price between KB and R & R an acceptable value for royalty purpose under Benchmark 1.

Solution

Example 2

Application of Benchmark 1

Situation II

KB Energy's NAL contract is comparable to Premium Gas' AL contract in the Buck Draw field.
Also KB Energy's price is equivalent to the price paid under Premium Gas Co's contract as both use the same index price. Therefore, KB Energy's December 2001 gross proceeds under its NAL contract represent an acceptable value for royalty purposes under benchmark 1.

Example 3

Application of Benchmark 1

<u>Situation III</u> – Valuation of unprocessed gas under Benchmark 1 where lessee's NAL contract is comparable and equivalent to another AL contract in the field.

Brite Star Field
During January 2000, KB Petroleum sold 50,000 MMBtu of gas to KB Gas Co. under a NAL contract. The contract term: 1/1/00 through 12/31/03.
Applicable Price: The price per MMBtu shall be fixed-escalation price. The fixed-escalation price shall be:

> A. For the month of January 2000: $ 3.75.
> B. As of the first day of February and the first day of each month thereafter, the fixed-escalation price shall be adjusted for such month by multiplying the fixed-escalation price applicable during the preceding month by 1.005.
> C. The fixed-escalation price established pursuant to the formula in paragraph B shall not exceed $ 5.75.

KB Gas Co. also purchases all gas under AL contracts from other producers in the Brite Star Field for its gas processing plant. The contract term: 1/1/00 through 12/31/03.
Applicable Price: The price per MMBtu shall be fixed-escalation price. The fixed-escalation price shall be:

> A. For the month of January 2000: $ 3.75.
> B. As of the first day of February and the first day of each month thereafter, the fixed-escalation price shall be adjusted for such month by multiplying the fixed-escalation price applicable during the preceding month by 1.005.
> C. The fixed-escalation price established pursuant to the formula in paragraph B shall not exceed $ 5.75.

All gas is like quality and all other comparability factors, except the ones noted above, are identical.

Example 3

Solution:

Application of Benchmark:1

Situation III
Benchmark 1 applies because the NAL contract and AL contracts in the field are identical.

KB Petroleum's price under its NAL contract is equivalent to the price paid under other comparable and equivalent AL contracts in the Brite Star field. Therefore, KB Petroleum's gross proceeds based on its NAL contract are acceptable under benchmark 1.

Example 4

Application of Benchmark: 2

Situation I.

Valuation of unprocessed gas under benchmark 2 where lessee's price is less than prices derived under AL contracts in the same field or area.

During July 2001, Premium Gas Trading Co buys like quality gas from producers in the same field (Bronco field) under the following contacts.

Seller	MMBtu	Term	Contract	Effective	Price/MMBtu
RR Energy	1,500	1 month	AL Spot	7/01/2001	$ 2.95
Quality Gas	8,900	6 yr	AL	4/01/2000	$ 5.65
Premium Gas Co	5,000	5 yr	NAL	1/01/2001	$ 3.95
JR Gas Co.	5,000	6 yr	AL	9/01/2000	$ 5.68
Rich Gas	9,000	7 yr	AL	1/01/1999	$ 5.67

Premium Gas Co's gross proceeds = 5000 x 3.95 = $ 19,750.

How do you go about valuing Premium Gas Co production?

Solution

Example 4

Application of Benchmark: 2

Situation I

Benchmark 1 fails because lessee's price is less than the to prices paid under AL sales contracts in the same field (Bronco field).

Premium Gas Co's gross proceeds based on $ 3.95/MMBtu will be far less than the gross proceeds determined under three AL contracts in the field. Thus, the Premium Gas Co's price is not equivalent to prices under those three AL contracts.

Under the second benchmark, Premium Gas Co must consider gross proceeds under AL contracts for like-quality gas in the same field (Bronco field).

Premium Gas Co may use Quality Gas or JR Gas or Rich Gas price [any one of the three contracts price] to value its gas under benchmark 2.
In this market RR Energy spot sales value is not a good indicator of value in this field.

Example 5

Application of Benchmark 2.

Situation II

Valuation of unprocessed gas where no other AL contract exists in the field or area, and the affiliate resells the gas.

Pure Gas Field

During May 2002, Pure Gas E & P Inc. sold 10,000 Mcf of gas to Pure Gas Marketing & Trading Inc. at the wellhead. In turn Pure Gas Marketing and & Trading Inc. resold the gas to Green River Gas Co in the same field. The Pure Gas M & T is not a marketing affiliate. No sales of like quality gas under comparable AL contracts exist in the field or area.

Additional information follows.

Seller	Volume	Btu	NGL %	Contract	Price ($/MMBtu)
AAA Gas Co.	200,000	1281	20.26	NAL	$ 3.59
BBB Gas Co.	300,000	1407	28.50	NAL	$ 3.67
XYZ Gas Co.	500,000	1321	22.97	NAL	$ 3.65
Pure Gas E&P	10,000	1033	2.53	NAL	$ 3.48
Pure Gas M & T	10,000	1033	2.53	AL	$ 4.25

How do you value Pure Gas E & P Production?

Solution

Example 5

Application of Benchmark 2.
Situation II

Since no sales of like-quality gas under A/L contracts exist in the same field or nearby fields or areas, the valuation falls under benchmark 2.

Pure Gas M & T's full resale value is the best indicator of value.

Value = 10,000 x 1.033 x 4.25 = $ 43,902.50

Application of Benchmark 3

Under this benchmark a net-back method or any other reasonable method is applied for valuing processed gas or gas plant products.

- Rarely used.
- Applied on a case by case basis.