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Subject:	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)

Here's the draft guidance and training.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.

Sales to Affiliates: Gas, Oil & Coal

Purpose

To provide you with information and guidance on how to value Non-Arm's-Length [NAL] sales of oil, gas and coal from Federal and Indian lands. You will demonstrate the skills learned by working exercises and a case study, individually and in groups.

Definitions

<u>Lessee:</u> Any person to whom the U.S. or a tribe or an Indian owner issues a lease, and any person who has been assigned an obligation to make royalty or other payments required by the lease.

Definitions

Lessee: This includes any person who has an interest in a lease as well as an operator or payor who has no interest in the lease but who has assumed the royalty payment responsibility.

Definitions

Marketing Affiliate – An affiliate of the lessee whose function is to acquire only the lessee's production and to market that production.

(This definition does not apply to coal.)

Definitions

Affiliate – Corporations/organizations which are related either as (1) parent and subsidiary, or as (2) subsidiaries of the same parent organization.

Definitions

Affiliate – If the lessee transfers or sells production to an affiliate that also buys production from other sources, that affiliate is not a marketing affiliate.

Definitions

Arm's-Length [AL] – Contract arrived at in the market place between independent, non-affiliated persons with opposing economic interests.

- Ownership > 50% Control
- Ownership = 10% - 50% Presume Control
- Ownership < 10% Assume Non-control

Definitions

- Guidance issued in light of the National Mining Association decision provides other factors to consider to determine whether there is control in situations where ownership is between 10 and 50 %.

National Mining Association, Appellant, v. United States Department of the Interior, et al., 177 F3d 1 (D. C. Cir., 1999)

Definitions

- Factors to be considered include:
  - The extent to which there are common officers or directors
  - The percentage of ownership and relative percentage of ownership of voting securities or other instruments of ownership
  - Operation of a lease, plant, or other facility or the extent of participation in management or operation
  - Other evidence of power to exercise control

Definitions

- Regardless of any percentage of ownership or common ownership, relatives, either by blood or marriage, are affiliates.

Definitions

<u>Gross Proceeds</u> – The value of production for royalty purposes shall never be less than the gross proceeds accruing to the lessee.

Definitions

Gross Proceeds:

Includes reimbursements for:

- Taxes
- Production related costs
- Certain services [dehydration, sweetening, marketing]
- Detail applicable to coal is found on slides 82 - 87

Definitions

Sale – A contract between two persons (parties) where:

- the seller unconditionally transfers title to the production to the buyer
- the buyer pays money or other consideration for the sale
- the parties' intent is for a sale to occur

Definitions

Marketable Condition – means lease products which are sufficiently free from impurities and otherwise in a condition that they will be accepted by a purchaser under a sales contract typical for the field or area.

Definitions

Marketable Condition – (Cont'd)

Normal requirements – lessee must meet pressure and quality (Btu, moisture, H_2S, CO_2) requirements.

Marketable Condition and Duty to Market

The lessee must place production in marketable condition and market the production for the mutual benefit of the lessee and the lessor at no cost to the Federal Government or Indian lessor, unless otherwise provided in the lease agreement.

Marketable Condition and Duty to Market

Where the value is determined by a lessee's gross proceeds, that value will be increased to the extent that the gross proceeds have been reduced because the purchaser, or any other person, is providing certain services the cost of which ordinarily is the responsibility of the lessee to place the production in marketable condition or to market the production.

Valuation Guidance

Fina Court Decision

- Value gas sold to non-marketing affiliates based on the first applicable benchmark.
- The court overturned a portion of the Texaco decision (MMS-92-0306-O&G), which held that gross proceeds were based on the non-marketing affiliate's first arm's-length resale.

Valuation Guidance

"If the affiliate of the lessee also purchases gas from other sources, then that affiliate presumably will have comparable arm's-length contracts with the other parties which should demonstrate the acceptability of the gross proceeds accruing to the lessee from its affiliate." (from the preamble to the 1988 gas valuation rule, *Federal Register*, Vol. 53, No. 10, January 15, 1988)

Valuation Guidance

- Xeno inc, IBLA 92-501, 11/14/1995

  Gross proceeds

- IBLA 91-266

  Gross proceeds and access to records of an affiliate

Valuation Guidance

- IBLA 90-509, 9/28/1993

  Santa Fe Energy Products Co.

  Affiliate Sales

- Tenth Circuit Court of Appeals No. 95-1221, 4/10/1996

  Santa Fe Energy Products Co.

  Records of the affiliates

- IBLA 87-762, 88-56, 8/29/1989

  Conoco, Arco

  Floor value for determining fair market value

Federal Valuation Guidance – Gas

Regulatory Authority

- 30 CFR § 206.152 (c) and (h) (2003) establishes value for unprocessed gas sold under NAL contracts.
  - The value shall be the reasonable value determined under the first applicable benchmark, but not less than gross proceeds.
- 30 CFR § 206.153 (c) and (h) (2003) establishes value for processed gas sold under NAL contracts.
  - The value shall be the reasonable value determined under the first applicable benchmark, but not less than gross proceeds.

Federal Valuation Guidance - Gas

- First Benchmark: Lessee's gross proceeds if equivalent to gross proceeds under comparable AL contracts.
- Second Benchmark: The gross proceeds determined under AL contracts for like-quality gas in the same field or area, or AL spot sales or other public sources.
- Third Benchmark: Net-back method or other reasonable valuation method.

Benchmarks – Factors - Gas

Compute gross proceeds using two criteria (or filters): equivalency of gross proceeds and comparability of AL contracts

- Equivalency: NAL contract gross proceeds are not less than the most comparable AL contract gross proceeds
- Comparability: Utilize the following screening criteria or factors
  - Price – Components of the contract price (transportation factors, marketing costs, etc.)
  - Duration – Contract period

Benchmarks – Factors - Gas

- Comparability (Cont'd)
  - Market(s) served, or point of sale
  - Terms – for example, conventional vs. percentage of proceeds contract, or long-term vs. short-term
  - Quality – methane content (mole %), NGL content, non-hydrocarbon gas content (hydrogen sulfide, CO2, etc.)
  - Volume – delivered quantity
  - Other appropriate factors – any factors unique to a particular audit/compliance situation
- Comparability is unique to each audit/compliance review

Benchmarks – Factors - Gas

Example of Factors – Price

Production: 200,000 Mcf ; Contract NAL;

Price $ 3.79

Purchaser/Seller	Mcf	Contract	Price($)
A & R Corp	200,000	Spot	3.65
BW Gas Inc	413,000	AL	5.41*
Cad Energy	185,000	AL	5.29
Tee Corp	359,000	AL	5.68*
JW Petroleum	10,000	AL	5.27

*Contracts include a transportation fee

Benchmarks – Factors - Gas

Example of Factors: Price

<u>Solution:</u>

- A & R Corp price does not represent market price in the field or area.
- The Cad Energy price represents the most comparable well head sale and price in the field.
- The BW Gas and Tee Corp contracts are not for well head sales.
- The JW contract is not for comparable quantities.

Benchmarks – Factors - Gas

Example of Factors – Duration

Production month: July 2001; 200,000 Mcf ; contract NAL; 4 year term; Effective 1/1/2000 – 1/1/2005; Price: $ 4.29

Purchaser/Seller	Mcf	Contract	Duration	Effective	Price $
A & R Corp	200,000	Spot	1 month	1/7/01	4.20
BW Gas Inc	213,000	AL	1 year	7/1/00	4.29
Cad Energy	255,000	AL	6 years	7/1/96	5.68
Tee Corp	189,000	AL	10 years	5/1/93	5.01
JW Petroleum	239,000	AL	3 years	9/1/98	4.53
Hi Octane Corp	268,000	Spot	3 months	5/1/01	4.23

Which one is the most comparable contract?

Benchmarks – Factors - Gas

Example of Factors: Duration

Solution: JW Petroleum is the most comparable contract and the price is $4.53/Mcf. The Cad Energy and Tee Corp. contracts could also be considered comparable, because they are long-term, but we must settle for the lowest comparable price.

Benchmarks – Factors - Gas

Example of Factors: Like-Quality Gas

Lease: # AAA; Production 150,000 Mcf; Contract NAL; Btu – 1041; Gas Comp - 0.89% Inert gas; NGL % - 2.98; Price/MMBtu $3.99.

Lease	*Production*	*Contract*	*Btu*	*Inert gas%*	*NGL%*	*Price($)*
A	410,000	AL	1034	0.63	2.54	4.19
B	368,000	AL	1407	1.26	28.50	5.17
C	440,000	AL	1321	2.01	22.91	4.88
D	288,000	AL	1047	0.99	3.35	4.65
E	300,000	AL	1281	2.19	20.26	4.27

All Btu at 14.73 psia. Which one of the leases has like quality gas?

Benchmarks - Factors – Gas

Example of Factors: Like-Quality Gas

<u>Solution</u>: Leases A and D could be considered as producing similar quality gas. D is most comparable and is also the higher price. The others have significantly different NGL content. The auditor may need to look at other factors to determine which of these is most comparable.

Application of Benchmarks - Gas

- First Benchmark: Lessee's gross proceeds if equivalent to gross proceeds under comparable AL contracts in the field or area.
  - Use the most comparable AL contract to determine value
  - Compare the lessee's NAL gross proceeds to the AL gross proceeds in the field or area. If the NAL gross proceeds are greater than or equal to comparable AL gross proceeds, then accept the NAL gross proceeds.

Application of Benchmarks - Gas

First Benchmark (cont'd.)

Examples 1, 2 and 3

Application of Benchmarks - Gas

- Second Benchmark: The gross proceeds determined under AL contracts for like-quality gas in the same field or area, or AL spot sales or other public sources.
  - Used when:
    - Lessee's gross proceeds are not equivalent to the gross proceeds paid under comparable AL contracts, or if
    - No comparable AL contracts exist in the field or area, or if
    - Lessee receives no consideration

Application of Benchmarks - Gas

- Second Benchmark (cont'd):

  Lessee must consider other relevant information in valuing like-quality gas in the field or area

  - Gross proceeds under AL contracts
  - Published prices
  - AL spot prices
  - Other reliable public sources
  - Any information unique to the property

Application of Benchmarks - Gas

- Second Benchmark (cont'd):

Examples 4 and 5

Application of Benchmarks - Gas

- Third Benchmark: A net-back method or any other reasonable valuation method.
  - Determined on a case-by-case basis
  - Example: use AL gross proceeds (adjusted for quality and transportation) from a nearby field or area

Application of Benchmarks - Gas

- Third Benchmark:

Example 6

Audit/Compliance Approach

Audit/Compliance Approach

- Determine the <u>first applicable</u> benchmark value and compare to gross proceeds. Value for royalty purposes is the higher of the two.

Audit/Compliance Approach

- Determine lessee's gross proceeds:
  - Add back any costs deducted for putting the products into marketable condition
  - Add any reimbursement received for costs incurred in putting the products into marketable condition
  - Increase value by any costs incurred by any other party to put the production into marketable condition

Audit/Compliance Approach

- Determine lessee's gross proceeds:
  - Add back any marketing costs deducted from the lessee's gross proceeds
  - Add any reimbursement received for marketing the product.
  - Increase value by costs incurred by any other party to market the production.

Audit/Compliance Approach

- Determine lessee's gross proceeds:
  - Add any tax or other reimbursements

Audit/Compliance Approach

- Access to records
  - Any Federal or Indian lessee will make available upon request to the authorized MMS or State or Indian representatives, to the Office of the Inspector General of the Department of the Interior, or other person authorized to receive such information, arm's-length sales and volume data for like-quality production sold, purchased or otherwise obtained by the lessee from the field or area or from nearby fields or areas.
  - From 30 CFR 52 (e) (2), 102 (d), 152 (e) (2), 153 (e) (2), 172 (e) (2) (1999), 173 (e) (2) (1999)

Special Situations

- NAL POP Contacts
  - Valued as processed gas
  - Value of residue gas and NGLs is based on benchmarks
  - Processing costs are based on the lessee's actual costs to process the gas
  - When the residue gas is sold NAL, accounting for comparison is required

Special Situations

Refer to the Oil and Gas Payor Handbook Volume III, Product Valuation (8/1/2000) on page 4-55 for the following situations.

- Warranty contracts
- Exchange agreements
- Keep-whole agreements
- Residue gas returned to the lease
- Pool pricing

Case Scenario with Court Decisions

Indian Gas

Indian Gas

- Old Regulations: 30 CFR 172-173 (1999)
  - The same benchmarks discussed under Federal gas valuation apply

- New Regulations: 30 CFR 172-173 (2000)
  - Effective January 1, 2000
  - NAL production not in an index zone
    - valued at the higher of NAL gross proceeds, benchmark value or major portion price

Oil Valuation

Oil Valuation

- Regulatory Authority
  - 30 CFR 206.102 (c) Valuation standards for Federal oil (prior to July 2001)
    - The value shall be the reasonable value determined under the first applicable benchmark.
  - 30 CFR 206.52 (c) Valuation standards for Indian oil
    - The value shall be the reasonable value determined under the first applicable benchmark.

Benchmarks – Factors - Oil

Compute gross proceeds using two criteria (or filters): equivalency of gross proceeds and comparability of AL contracts

- Equivalency: NAL contract gross proceeds are not less than the most comparable AL contract gross proceeds
- Comparability: Utilize the following screening criteria or factors
  - Price – Components of the contract price (transportation factors, marketing costs, etc.)
  - Duration – Contract period

Benchmarks – Factors - Oil

- Comparability (Cont'd)
  - Market(s) served, or point of sale
  - Terms – for example, conventional vs. percentage of proceeds contract, or long-term vs. short-term
  - Quality – Btu, gravity of oil, sulphur content
  - Volume – delivered quantity
  - Other appropriate factors – any factors unique to a particular audit/compliance situation
- Comparability is unique to each audit/compliance review

Oil Valuation

- First Benchmark: Lessee's gross proceeds
  - Lessee's contemporaneous posted prices or oil sales contract prices used in AL sales
  - Lessee's price must be:
    - Comparable to other contemporaneous AL prices
    - Used to purchase significant quantities of like-quality oil
    - Used to purchase production in the same field or area

Oil Valuation

- First Benchmark:
  - If the lessee buys and/or sells AL at different postings or prices, use volume weighted average price to value production
  - If not, go to the next benchmark

Oil Valuation

- Second Benchmark:
  - Arithmetic average of contemporaneous posted prices used in AL transactions by persons other than the lessee.
    - Must be used to purchase:
      - Significant quantities of like-quality oil
      - Production in the same field or area
      - AL purchases (including premiums) by parties other than the lessee
    - Determine significant quantities case-by-case

Oil Valuation

- Third Benchmark: Arithmetic average of other contemporaneous AL contract prices for significant quantities of like-quality oil in the same area or nearby area.
  - Include premiums

Oil Valuation

- Fourth Benchmark: Prices received for AL spot sales of significant quantities of like-quality oil from the same field or area and other relevant matters.
  - Use when no AL posted prices or sales contracts exist in the same field, area or nearby areas.

Oil Valuation

- Fifth Benchmark: A net-back method or any other reasonable method to determine value
  - Apply on a case-by-case basis

Oil Valuation

- 30 CFR § 206.52 (h) and 206.102 (h):
  - Under no circumstances shall the value of production, for royalty purposes, be less than the gross proceeds accruing to the lessee for lease production, less applicable allowances.

Audit/Compliance Approach

- Determine the first applicable benchmark value and compare to gross proceeds. Value for royalty purposes is the higher of the two.
- See slides 42 – 44 for more discussion of gross proceeds, duty to market, and marketable condition.

Federal Coal

Federal Coal

- Valuation regulations apply only to ad valorem leases
- 30 CFR 206.257 (c) (1) Valuation standards for NAL coal sales from ad valorem leases
- The value of coal will be based upon the first applicable of 5 criteria:

Federal Coal

First benchmark:

- Gross proceeds under the lessee's NAL contract if within the range of gross proceeds from comparable AL contracts for like quality coal produced in the area.
  - Include sales, purchases, or other dispositions
  - Determine comparability based on factors:
    - Price, time of execution, duration, markets served, terms, quality, and other factors

Federal Coal

First benchmark:

Example 7

Federal Coal

Second benchmark:

- Prices reported for that coal to a public utility commission.

Federal Coal

Second benchmark:

Example 8

Federal Coal

Third benchmark:

- Prices reported for that coal to the Energy Information Administration of the Department of Energy.

Federal Coal

Third benchmark:

Example 9

Federal Coal

Fourth benchmark:

- Other relevant matters published or publicly available spot market prices.
- Or information submitted by the lessee concerning circumstances unique to a particular lease operation or the saleability of certain types of coal.

Federal Coal

Fourth benchmark:

Example 10

Federal Coal

Fifth benchmark:

A net-back or any other reasonable method.

Federal Coal

Fifth benchmark:

Example 11

Federal Coal

- 30 CFR 206.257 (g) Valuation standards for ad valorem leases
  - For royalty purposes the value may not be less than the gross proceeds accruing to the lessee for coal production. Less applicable provisions of 206.257 (b)(5) and less applicable allowances.

Federal Coal

- 30 CFR 206.257 (b) (5)
- The value of production for royalty purposes shall not include payments received by the lessee pursuant to a contract which the lessee demonstrates, to MMS's satisfaction, were not part of the total consideration paid for the purchase of coal production.

Audit/Compliance Approach

- Determine the <u>first applicable</u> benchmark value and compare to gross proceeds. Value for royalty purposes is the higher of the two.

Audit/Compliance Approach

30 CFR 206.251:

- Definition of gross proceeds for royalty purposes:
  - Total monies and other consideration accruing to the lessee for the production and disposition of the coal produced.

Audit/Compliance Approach

30 CFR 206.251:

- Definition of gross proceeds for royalty purposes:
  - Includes, but is not limited to: payments to the lessee for certain services such as crushing, sizing, screening, storing, mixing, loading, treatment and other preparation of the coal to the extent that the lessee is obligated to perform them at no cost to the Federal Government.

Audit/Compliance Approach

30 CFR 206.251:

- Definition of gross proceeds for royalty purposes:
  - Also includes, but is not limited to
    - Reimbursements for royalties, taxes, or fees
    - And other reimbursements
  - Tax reimbursements are part of the gross proceeds even though the Federal royalty interest may be exempt from taxation

Audit/Compliance Approach

30 CFR 206.251:

- Definition of gross proceeds for royalty purposes:
  - Monies and other consideration to which a lessee is entitled, but which it does not seek to collect through reasonable efforts are also part of gross proceeds

Audit/Compliance Approach

- Gross Proceeds may include:
  - Sales proceeds (including contract entitlements not collected)
  - Price adjustments
  - Payments made on behalf of the purchaser
  - Non-cash consideration – including:
    - mining equipment/facilities
    - marketable condition services and marketing services
    - discounted electricity rates
    - water rights
    - any other thing of value (my personal favorite)
  - Added-value of marketable condition
  - Pre- and Post-production payments
  - Settlement payments

Audit/Compliance Approach

- Gross proceeds does NOT include:
  - Ash haulage to pit
  - Limestone haulage to power plant
  - Chemical alteration
  - Beneficiation
  - Force Majeure
  - Liquidated damages (contract breach)
  - Buyout

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

What should be the value for royalty purposes?

Solution
Example 1

Application of Benchmark 1. Situation I

There are three comparable contracts in Lone Star Field. The Star Energy contract is not a comparable contract because it is a monthly contract. The Sun Energy and the Renewable Energy contracts are comparable contracts. 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
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 are 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
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 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.

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

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

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

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.

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

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.

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

Gross Proceeds = 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
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:
- l the contract is comparable to arm's length contracts
- l 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

<u>Example:</u>

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

Example:

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

<u>Example:</u>

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

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.

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"*

<u>Example:</u>

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.