

EXXON CORP.

IBLA 86-626

Decided March 8, 1991

Appeal from a decision of the Director, Minerals Management Service, affirming in part and reversing in part a decision of the Chief, Royalty Valuation and Standards Division, granting in part and denying in part a petition for transportation and processing allowances. MMS 84-0066-O&G.

Reversed in part, affirmed in part, and remanded.

1. Oil and Gas Leases: Royalties: Generally

In valuing sour gas for royalty purposes, MMS erred in denying a transportation allowance for all reasonable costs incurred by a lessee in dehydrating the gas outside the gas field prior to its transportation to a processing plant where manufacture and further dehydration occur.

2. Oil and Gas Leases: Royalties: Generally

When valuation of production is challenged, appellant must not merely show that the agency's methodology is susceptible to error, but that an error did, in fact, occur. The agency's limitation of a transportation allowance to 50 percent of the value of the products transported will not be disturbed in the absence of evidence demonstrating error.

3. Oil and Gas Leases: Royalties: Processing Allowance

Where a sour gas stream is processed by a lessee to yield methane, nitrogen, CO₂, sulfur, and helium and MMS limits a processing allowance to two-thirds of the value of nitrogen, CO₂, and sulfur and denies any deduction against the value of methane, a residue gas, the agency decision will be reversed upon a showing that the allowance does not approximate the lessee's reasonable costs of manufacture. For onshore production occurring prior to Mar. 1, 1988, no basis exists in these circumstances to deny a deduction against the value of residue gas.

APPEARANCES: Harlan C. Martens, Esq., Steven R. York, Esq., Midland, Texas, for appellant; Peter J. Schaumberg, Esq., Office of the Solicitor, U.S. Department of the Interior, Washington, D.C., for the Minerals Management Service.

OPINION BY ADMINISTRATIVE JUDGE FRAZIER

Exxon Corporation has appealed from a decision of the Director, Minerals Management Service (MMS), dated January 7, 1986, affirming in part and reversing in part a decision of the Chief, Royalty Valuation and Standards Division (RVSD). The decision of the Chief, RVSD, dated October 29, 1984, granted in part and denied in part Exxon's petition of March 23, 1984, for processing (manufacturing) and transportation allowances. The allowances at issue are critical to determine the value of production from gas wells operated by Exxon in the Graphite, Lake Ridge, and Fogarty Creek Federal Units, Sublette County, Wyoming. 1/

1/ Exxon is the operator of these three units, which are located in the Riley Ridge area of Sublette County. The three units total 39,850 acres,

The Director's decision was expressly limited to gas produced from the Madison formation of the aforementioned units within the Riley Ridge gas field. The composition of this gas stream (described by the parties as "sour gas") is: carbon dioxide (65.4 percent); methane (22 percent); nitrogen (7.5 percent); hydrogen sulfide (4.5 percent); and helium (0.6 percent). ^{2/}

Exxon sought but did not receive any offers to purchase this raw gas stream at the wells. As a result, appellant undertook to separate marketable products from the gas stream by constructing its Shute Creek gas processing plant some 40 miles south of the field. Although this plant was not onstream when the Director issued his decision, the Director acknowledged that Exxon's "selective separation of the various components of the Riley Ridge gas stream requires a series of relatively complex

fn. 1 (continued)

of which 37,930 acres are Federally owned (Director's Decision, Jan. 7, 1986, at 1). Exxon holds leases covering approximately 37,512 net acres of state and Federal lands within these units (Statement of Reasons (SOR), Mar. 20, 1986, at 1). The Riley Ridge area contains an estimated 17.5 trillion cubic feet of gas at depths exceeding 15,000 feet (Director's Decision at 1).

^{2/} Director's Decision at 1. See also Exxon Corp. v. Lujan, 730 F. Supp. 1535, 1536 (D. Wyo. 1990), for a similar, though not identical, breakdown of Exxon's gas stream. Exxon describes this gas as "unique" and "complex" and MMS acknowledges it to be "atypical" (SOR at 1; Answer, June 9, 1986, at 9). The parties agree that the gas stream is "not high in hydrocarbons" and "not combustible" and for this reason does not provide a source of power for dehydration operations, infra. Director's Decision at 3; Correspondence, Mar. 23, 1984, from P. W. Henderson, Division Operations Manager, Production Department, Exxon, to Wm. Feldmiller, Chief, RVSD, at 2. Nearly three-quarters of the gas stream is inert material that lowers the Btu value of the stream. Request for Special Exceptions, Jan. 18, 1985, at 5.

manufacturing processes" not encountered in separating most natural gas streams (Director's Decision at 2).

3/

Exxon's March 23, 1984, petition requested confirmation by RVSD that certain costs incurred by appellant would be deducted from the value of finished products to determine for royalty purposes the value of the raw gas stream. 4/ The processing and transportation allowances at issue correspond to various operations by which this raw gas is changed into marketable products.

Exxon's raw gas is produced from unit wells, gathered in the field, and dehydrated at a central dehydration facility located outside the units. The dried gas stream is then transported from the dehydration facility through approximately 40 miles of feed gas pipeline to the Shute Creek gas processing plant.

Separation of the gas stream into its components occurs _____
3/ "Most natural gas streams contain predominantly hydrocarbons, some water, and relatively small quantities of various contaminants," the Director explained. "Essentially, these gas streams are marketed after a few simple processing steps designed to remove the water and contaminants" (Director's Decision at 2.)

4/ Exxon used this method of valuing the gas stream because no market for this sour gas could be found. By starting with the value of finished goods and deducting therefrom certain costs incurred to produce such goods, Exxon resolved to "work back" to the value of the production at the lease. This "work back" method is also referred to as the "net back" method of valuing production at the lease. See Ashland Oil, Inc. v. Phillips Petroleum Co., 554 F.2d 381, 387 (10th Cir. 1977), cert. denied, 434 U.S. 921, rehearing denied, 434 U.S. 977 (1977), on remand, 463 F. Supp. 619 (N.D. Okla. 1978), aff'd in part and rev'd in part, 607 F.2d 335 (10th Cir. 1979), cert. denied, 446 U.S. 936 (1980) ("It is obvious that comparable sales or current market price is the best [evidence of value], and second would come the work-back method"). See also the definition of "net-back method" at 30 CFR 206.151 (1989).

at the plant, and sales of these components are then made at the first potential market. Collectively, Exxon refers to these various operations as its LaBarge Project.

Methane, the most valuable component of the gas stream, is sold at the tailgate of the plant, as are nitrogen and helium. CO₂ is transported by pipeline for sale at Rock Springs and Bairoil, Wyoming. Sulfur is transported 16 miles by rail to Opal, Wyoming, where it is sold.

By its March 23, 1984, petition, appellant sought confirmation of allowances for the following costs: (1) the capital and operating costs of three dehydration facilities; 5/ (2) the capital and operating costs of a pipeline to carry the dried gas stream from the dehydration facilities to the Shute Creek gas processing plant; (3) the capital and operating costs of the Shute Creek gas processing plant without limitation by reference to product; and (4) the capital and operating costs of a 16-mile railroad spur to transport sulfur from the Shute Creek gas processing plant to Opal.

By decision of October 29, 1984, RVSD denied Exxon's request to deduct the cost of its dehydration facilities and the cost of transport-ing the LaBarge gas stream to the Shute Creek gas processing plant. Such

5/ Exxon's plan for three dehydration facilities, one in each of the Graphite, Lake Ridge, and Fogarty units, was changed in 1984. In place of three facilities, a single central dehydration facility was built at a lower elevation outside the units (SOR at 40). Despite that fact, in his 1986 decision the Director continued to refer to separate field dehydration units. See Director's Decision at 10.

costs were not deductible, RVSD concluded, because a lessee is responsible for operational expenses imposed by environmental considerations. ^{6/} An allowance for processing the gas stream at Shute Creek was approved, but these deductions could be applied only to "associated products" (all products except methane) and were limited to 66-2/3 percent of the value of all "associated products." No portion of processing costs could be applied to methane, which RVSD regarded as the "principal product" of the gas stream. Lastly, RVSD approved an allowance for costs incurred in transporting CO₂, sulfur, and methane (after being placed in a marketable condition) from the Shute Creek gas processing plant to the point of first sale; this allowance was, however, limited to 50 percent of the value of each product so transported and sold.

Exxon appealed RVSD's holdings to the Director, MMS, and it is the Director's decision that we review here. ^{7/} In this January 7, 1986,

^{6/} RVSD here refers to the fact that BLM and the U.S Forest Service recommended that Exxon's gas processing plant not be located near the field.

^{7/} After Exxon's notice of appeal had been filed and briefing completed, MMS revised its royalty valuation regulations at 30 CFR Part 206. 53 FR 1230 (Jan. 15, 1988). These regulations applied prospectively to oil and gas produced on or after Mar. 1, 1988. 53 FR at 1184, 1230, and 1237 ("[T]hese rules do not have any retroactive effect"). Pursuant to these new regulations, Exxon filed a royalty valuation proposal with MMS seeking, *inter alia*, new maximum limits for transportation costs (75 percent of product values) and processing costs (95 percent of product values) and an extraordinary processing allowance against the value of methane. Also, Exxon advised the Board that discussions were occurring between it and MMS to settle all outstanding royalty valuation issues for the LaBarge Project, including the issues on appeal in IBLA 86-626. By order of Apr. 6, 1988, this Board suspended review of IBLA 86-626 to permit settlement talks to proceed.

On Oct. 19, 1988, the Assistant Secretary, Land and Minerals Management, issued an order that adopted as final for the Department certain findings and conclusions of RVSD responding to Exxon's royalty valuation

decision, the Director stated that the Secretary's authority to require payment of royalties is found at section 17(c) of the Mineral Leasing Act,

fn. 7 (continued)

proposal. The Assistant Secretary stated that the royalty valuation determination set forth in RVSD's findings and conclusions applied to gas produced on or after Mar. 1, 1988, the effective date of the new regulations.

In the Assistant Secretary's order of Oct. 19, 1988, the following conclusions, inter alia, were adopted as final for the Department:

"Dehydration is not considered a function of the transportation of the gas stream. Dehydration is clearly addressed at 30 CFR 206.158 [1988] as a cost to place production in a marketable condition and, therefore, is not to be borne by the lessor. Whether this step is performed in the field or in the processing plant, it must eventually be done before any product is sold. All marketed gas streams are dehydrated to eliminate corrosion and malfunction in gas handling systems. No gas purchaser will knowingly accept corrosive products into its system, hence, dehydration is essential to marketing. The LaBarge case, despite possibly high costs resulting from unusual composition, is no exception. The MMS has established precedent and procedure regarding the dehydration of gas, and the "Romere Pass" decision (California Company v. Udall, 296 F.2d 384 D.C. Circuit 1961) upheld these requirements. Also, the Director's decision dated January 7, 1986 (MMS-84-0066-O&G), determined that an allowance for dehydration costs should not be allowed for this project.

"This decision on the field dehydration facility is consistent with the Director's decision in MMS-84-0066-O&G which is on appeal to the IBLA in case number 86-626. If the IBLA reverses the Director in case number 86-626 and allows Exxon to deduct the costs of the field dehydration facility as a transportation cost, or if the IBLA affirms the Director but upon judicial review thereof a court in a final, non-appealable decision determines that Exxon may deduct the costs of the field dehydration facility as a transportation cost, then this decision also shall be so modified.

* * * * *

"The MMS has carefully considered the applicability of the extraordinary processing allowance for the LaBarge project and has concluded that approval of such an allowance would be premature at this time. The MMS is in the process of preparing a policy which will define the conditions (feed gas composition, processes involved, costs thresholds, etc.) under which an extraordinary allowance should be granted. Until such a policy is adopted, no extraordinary processing allowances will be approved. Further, a review of information related to certain other gas processing plants located in the Wyoming Overthrust Belt has revealed that the Shute Creek Plant is neither the most expensive to operate (\$/Mcf throughput) nor was it the most costly to construct (\$/Mcf capacity).

"At the time that a policy on extraordinary costs is adopted, MMS will consider whether any of Exxon's requests meet the criteria, including an allowance for the costs of the field dehydration facility.

30 U.S.C. § 226(c) (1982). This section conditions the grant of a lease "upon the payment by a lessee of a royalty of 12-1/2 per centum in amount

or value of the production removed or sold from the lease." 8/ (Emphasis added.) Under section 17(c), considerable discretion is vested in the Secretary to determine what is the value of production (Director's Decision at 9).

fn. 7 (continued)

"Summary of LaBarge Valuation Methodology

"In summary, the value, for royalty purposes, of each individual LaBarge product should be determined as follows:

* * * * *

"Processing costs, excluding costs of recompression and allocated by volume, should be deducted from the product tailgate value. The allowable processing costs should be allocated to all products, royalty-bearing and non-royalty-bearing, on the basis of that product's volume percentage in the sour gas feed stream (excluding CH₄ [methane]). No allowance may be taken for any product which is not royalty-bearing. The processing allowances for CO₂ and nitrogen are limited to 95 percent of the tailgate value. For sulfur, the processing allowance is limited to 66-2/3 percent of the tailgate value of the sulfur.

"Pre-plant transportation costs allocated by volume, excluding the costs of dehydration and subsurface water disposal, should be deducted from the plant inlet values. The allowable pre-plant transportation costs should be allocated to all products, royalty-bearing or not, on the basis of that product's volume percentage in the sour gas feed stream (including CH₄ [methane]). No allowance may be taken for any product which is not royalty-bearing. Under no circumstances shall the combined pre-plant and post-plant transportation allowance be more than 50 percent of any product's sales value on the basis of a selling arrangement."

Thereafter, by letter dated May 16, 1989, Exxon requested that the Board return the appeal to active status. MMS supported that request. As a result of the 1988 amendments to 30 CFR Part 206 and the Assistant Secretary's order of Oct. 19, 1988, our review of the Director's decision is limited to production commencing with first production and extending to and including Feb. 29, 1988. With respect to production occurring after Feb. 29, 1988, the sole effect of the instant decision is to require modification of the Assistant Secretary's order denying a transportation allowance for the cost of constructing and operating Exxon's central dehydration facility.

8/ Section 17(c) has been amended by the Federal Onshore Oil and Gas Leasing Reform Act of 1987, P.L. 100-203, § 5102(b), 101 Stat. 1330-256 (1987). Language underscored above is, however, preserved intact.

In the exercise of this discretion, the Secretary has decided that royalties must be based on the value of the production after it has been placed in a marketable condition, the Director stated. As support for this proposition, the Director cited California Co. v. Udall, 296 F.2d 384, 387 (D.C. Cir. 1961), which states: "The premise for the Secretary's decision [valuing production without an allowance for compression or dehydration] was that, since the lessee was obliged to market the product, he was obligated to put it in marketable condition; and that the 'production' was the product in marketable condition." (Emphasis added.) As a corollary to this obligation to market the product, the Director held that the cost of placing production in a marketable condition must be borne by the lessee.

Applying California Co. v. Udall to the facts at hand, the Director denied Exxon's request for an allowance for costs of dehydrating the LaBarge gas stream at the dehydration facilities. This holding relied upon a finding, attributed to Kuntz, The Law of Oil and Gas § 40.5 (1967), that dehydration is part of the task of marketing the production. Such an allowance was improper, the Director concluded, irrespective of whether dehydration occurred in the field, at a processing plant or, as here, at both sites due to environmental considerations dictating the siting of the Shute Creek gas processing plant.

As noted above, RVSD denied Exxon's request for an allowance for costs incurred in transporting the LaBarge gas stream to the Shute Creek gas processing plant. In this one respect, the Director reversed RVSD and held that appellant was entitled to such transportation allowance. This action

was appropriate, the Director stated, because a lessee is entitled to an allowance based on the cost of transporting production to the nearest market. The record was clear that the nearest market for methane was at the tailgate of the gas processing plant (Director's Decision at 10).

Exxon's transportation allowance was, however, limited to "50 percent of the separate value of the leased 9/ products at the nearest competitive sales point" (Director's Decision at 10). Conservation Division Manual (CDM) § 647.5.3E was cited by the Director in support of this limitation. 10/

Addressing RVSD's decision to grant Exxon a processing allowance up to 66-2/3 percent of the value of "associated products," the Director characterized Exxon's appeal as a request for an allowance "based on (a) 2/3 of the value of the additional products, plus (b) 2/3 of the value of methane" (Director's Decision at 11). Such an allowance is impermissible, the Director held, because methane is the most valuable single component of the gas stream, and under the circumstances the separation of methane from the other products in the gas stream "must be regarded as part of the process of conditioning the production into a marketable product." Id. The costs of such conditioning must be borne by the lessee, the Director concluded,

9/ Although helium is a product of the Shute Creek gas processing plant, its value is not considered by MMS in valuing the LaBarge gas stream. Helium is not a leasable mineral. Its production and sale here by appellant is pursuant to a separate agreement with the United States.

10/ As to RVSD's limitation of a transportation allowance for costs of transporting CO₂ and sulfur to the point of first sale (Rock Springs, Bairoil, Opal), the Director noted that Exxon purported to reserve the right to appeal the application of this limitation insofar as it prevented recovery of the royalty share of transportation costs (Director's Decision at 7).

and no deduction based on the cost of processing methane is, therefore, appropriate.

In support of this holding, the Director cited United States v. General Petroleum Corp., 73 F. Supp. 225 (S.D. Cal. 1946), aff'd sub nom. Continental Oil Co. v. United States, 184 F.2d 802 (9th Cir. 1950), for the proposition that where natural gas is processed to yield products in addition to methane, a deduction from royalty value must be allowed as compensation for the cost of producing such additional products. The Department's consistent practice has been to apply processing costs against the value of such additional products up to a maximum of 66-2/3 percent (Director's Decision at 11).

As further support, the Director looked to 43 CFR 3103.3-1(c) (1986), which states: "In determining the * * * value of gas and liquid products produced, the * * * value shall be net after the cost of manufacture. The allowance for cost of manufacture may exceed two-thirds of the * * * value of any product only with the approval of the Secretary." The Department's construction of this regulation to exclude the value of gas in calculating a processing allowance has been upheld in United States v. General Petroleum Corp., supra, the Director stated. 11/

Exxon's timely appeal of the Director's decision focuses upon three issues: the denial of a transportation allowance for costs of dehydration

11/ On Jan. 18, 1985, appellant asked the Secretary to grant special excep-tions to RVSD's decision. The Director stated that a separate response by the Secretary was not anticipated, given the similarity of Exxon's request and its appeal from the RVSD decision.

at the central dehydration facility; the limitation of a transportation allowance to 50 percent of the value of products transported; and the limitation of a processing allowance to 66-2/3 percent of the value of lease products manufactured, excluding methane.

The gist of Exxon's argument to this Board may be expressed in a single sentence:

The Government has ignored the basic principle that determines the questions now on appeal: the Government's equity in leased oil and gas is confined to the raw material or the value of the raw material at the lease and does not extend to the value added by the costs of manufacturing or costs of transportation to the point of first market. [Emphasis added.]

(SOR, Mar. 20, 1986, at 6).

As support for this principle, appellant calls our attention to the Department's 1926 regulations, issued 6 years after enactment of section 17(c), supra. Section 4(d) of these regulations addresses a lessee's royalty obligation for natural-gas gasoline, a product extracted from natural gas produced on the leasehold:

Natural-gas gasoline * * * is a manufactured product. The value of this product is contingent upon the value of the raw material and the cost of its manufacture. The Government does not wish to collect royalty on that part of the value which is derived from the cost of manufacturing, inasmuch as the Government's equity is confined to the value of the raw material involved. In computing royalty on natural-gas gasoline the value of the raw gasoline in the natural gas as produced is assumed to be one-third the value of the marketable natural-gas gasoline

extracted from such gas, the remaining two-thirds being allowed to the lessee for the cost of manufacture. [Emphasis added.]

52 L.D. 1, 11 (1926).

Shell Oil Co., 52 IBLA 15, 88 I.D. 1 (1981), applied this same principle, Exxon states, in upholding a transportation allowance for pipeline costs incurred in transporting oil, produced offshore, to an onshore market. At issue in this case was the value added to offshore oil by its transportation onshore, appellant maintains.

Specifically, Exxon charges that the Director erred in denying an allowance for costs incurred in dehydrating the LaBarge gas stream. The central dehydration facility is an integral part of the raw gas transportation system, appellant contends, and its costs are costs incurred in transporting gas.

Exxon states that it located its Shute Creek gas processing plant approximately 40 miles from the gas field at the recommendation of BLM and the Forest Service. 12/ In the field, the LaBarge gas stream is highly corrosive because of the predominance of CO₂ and hydrogen sulfide therein, especially in the presence of water vapor. Ordinarily, such a raw acid gas stream is not transported long distances in its natural state, appellant notes. 13/

12/ Exxon's Request for Special Exceptions, Jan. 18, 1985, at 5.

13/ Id.; see also affidavit of Daniel R. Marlow, LaBarge Operations Manager, SOR at Exh. F.

Having sited its plant at Shute Creek, Exxon explains, it had two options for transporting the sour LaBarge gas stream from the field to Shute Creek. It could construct a pipeline of exotic materials capable of transporting the highly corrosive LaBarge gas, or it could dehydrate the gas and then transport it through a relatively conventional pipeline. Exxon concluded that the first option was not reasonable or practicable due to the cost, scarcity of materials, and likelihood of operational problems, e.g., pipeline blocking caused by formation of hydrates in cold weather. Had it selected the first option, Exxon maintains, the costs would have been deductible under the rule in Shell Oil Co., supra.

Appellant argues:

Because Exxon accomplished the same and only purpose--the transportation of the production of the field to the remote point of first market--at a lower cost, more safely and with decreased risk of interrupting manufacturing operations by constructing a dehydration facility and a less expensive pipeline--the MMS denied a deduction for the costs of dehydration on the grounds that dehydration is always "considered" to be for marketing purposes. This irrebuttable and procrustean rule is not based on reason, logic or the authorities cited by MMS. [14/]

In support of its position that dehydration should be regarded as a transportation cost (rather than a marketing cost), Exxon notes that RVSD found that "the field dehydration system is for transportation purposes only." 15/ (Emphasis added.) RVSD further found, in denying an allowance

14/ SOR at 41.

15/ SOR at 41, quoting from RVSD Findings and Conclusions, Oct. 29, 1984, at 9.

for dehydration costs, that "water removal here is for pipeline safety purposes (to prevent corrosion)," Exxon states.

Appellant argues that its dehydration facility would have been unnecessary had its gas processing plant been located in the field, and to this end it offers the affidavit of Daniel R. Marlow, LaBarge Operations Manager. Referring to the Shute Creek gas processing plant as the Manufacturing Facility, Marlow states:

If the Manufacturing Facility had been constructed in the field, the cost of the transportation required dehydration could have been eliminated. If such dehydration had been eliminated, the cost of the Manufacturing Facility would not have been increased and the water content requirements of all purchase contracts could have been satisfied by the manufacturing process. [16/] [Emphasis added.]

Marlow's mention of the manufacturing process here refers to the fact that dehydration also occurs after the gas stream has reached the Shute Creek gas processing plant. Initial dehydration at the central dehydration facility is, in fact, redundant, Marlow explains:

[T]he dehydration that occurs as an integral part of the manufacturing processes at Shute Creek * * * requires the gas to be virtually 100% dry (.01 lbs. water/mcf) before methane can be liquefied and removed, as any water would freeze at the -310°F operating temperatures and cause the shutdown of the Manufacturing Facility. Exxon's methane sales contract, by contrast,

^{16/} SOR at Exh. F; see also letter from M. W. Andrews of Exxon to Wm. Feldmiller, Aug. 29, 1984 ("Dehydration would not be required if the plant was located closer to the field").

calls for a maximum of 5 lbs. water/mcf--500 times the amount necessitated by the manufacturing process. [17/]

Exxon notes that RVSD held that costs associated with dehydration at the Shute Creek plant are deductible processing costs. 18/ RVSD did not treat these costs as a nondeductible cost of marketing, appellant states, because it recognized that the purpose of dehydration at Shute Creek is manufacture. The purpose of the central dehydration facility--transportation--is equally significant and may not be ignored by the Director, Exxon contends.

Appellant also calls our attention to Marathon Oil Co. v. United States, 604 F. Supp. 1375 (D. Alaska 1985), aff'd, 807 F.2d 759 (9th Cir. 1986), cert. denied, 480 U.S. 940 (1987), a case validating MMS' use of the net back method to value gas produced by Marathon in Alaska, lique-fied there, and shipped to Japan for sale. In that case, Exxon explains, Marathon unsuccessfully challenged an MMS order that called for Marathon to establish its "gross proceeds" by deducting actual costs of liquefaction and tankering from its landed sales price in Japan.

"Gross proceeds," undefined by regulation, is used at 30 CFR 206.103 (1987) in the following context:

17/ SOR at Exh. F; see also Andrews letter of Aug. 29, 1984, supra note 16 ("There is no incremental savings in the Selexol unit due to initial dehydration in the field"). Exxon also notes that partial rehydration of the sour gas stream is necessary in order for the initial Selexol process to function properly. RVSD Findings and Conclusions at 7, adopted by the Assistant Secretary, Land and Minerals Management, on Oct. 19, 1988.

18/ SOR at 42, quoting from RVSD Findings and Conclusions, Oct. 29, 1984, at 11.

§ 206.103 Value basis for computing royalties.

The value of production, for the purpose of computing royalty, shall be the estimated reasonable value of the product as determined by the Associate Director due consideration being given to the highest price paid for a part or for a majority of production of like quality in the same field, to the price received by the lessee, to posted prices, and to other relevant matters. Under no circumstances shall the value of production of any of said substances for the purposes of computing royalty be deemed to be less than the gross proceeds accruing to the lessee from the sale thereof or less than the value computed on such reasonable unit value as shall have been determined by the Secretary. In the absence of good reason to the contrary, value computed on the basis of the highest price per barrel, thousand cubic feet, or gallon paid or offered at the time of production in a fair and open market for the major portion of like-quality oil, gas, or other products produced and sold from the field or area where the leased lands are situated will be considered to be a reasonable value. [Emphasis added.]

Appellant contends that Marathon and 30 CFR 206.103 (1987) require MMS to determine the value of the LaBarge gas stream by using a true net back or gross proceeds method, i.e., by deducting Exxon's actual costs of manufacture and transportation from the value of its finished products.

Exxon analogizes Marathon's liquefaction, which MMS recognized as a deductible cost of transportation, to the dehydration performed by appellant at its central dehydration facility. In each case, appellant contends, a cost not inherently a transportation cost is incurred for the sole purpose of transporting product to the nearest market, a market remote from the field.

Replying to Exxon's argument that the Government's equity in leased oil and gas is confined to the raw material or the value of the raw material

at the lease, MMS states that it does not take issue with the proposition that Exxon is entitled to an allowance for manufacturing or transportation. MMS asserts, however, that it may reasonably limit such allowances, particularly so when such limitations reflect well-established principles.

It is well established by California Co. v. Udall, MMS states, that the Secretary has the authority to define "production," as that term is found in section 17(c). California Co. v. Udall upheld the Secretary's authority to define "production" as marketable gas and not merely raw product, MMS explains.

At issue in California Co. v. Udall was whether the Secretary properly denied a Federal operator a deduction from its contract price (12 cents/mcf) for costs of compressing gas (4.5 cents/mcf), removing excess water (0.25 cents/mcf) therefrom, and gathering (0.3 cents/mcf) in valuing production for royalty purposes. Resolving this issue in the affirmative, the U.S. Court of Appeals for the District of Columbia Circuit stated:

There is no question as to the Secretary's authority to require the payment of 12 1/2 per cent royalty on the "value of the production." The statute so provides. The parties agree that "value" means fair market value. The heart of this part of the controversy is the meaning of "production." Does it mean the raw product as it comes from the well, no matter what its condition? Or does it mean that product readied for the market in and to which it is being sold?

* * * * *

The premise for the Secretary's decision in the case before us was that, since the lessee was obliged to market the

product, [19/] he was obligated to put it in marketable condition; and that the "production" was the product in marketable condition. Theoretically, any gas--any "production"--is "marketable." We can assume that, if the price were low enough to justify capital expenditures for conditioning equipment, someone would undertake to buy low pressure gas having a high water and hydrocarbon content. A lessee who sold unconditioned gas at such a price would, in a rhetorical sense, be fulfilling his obligation to "market" the gas, and by thus saving on overhead he might find such business profitable. There is a clear difference between "marketing" and merely selling. For the former there must be a market, an established demand for an identified product. We suppose almost anything can be sold, if the price is no consideration. In the record before us there is no evidence of a market for the gas in the condition it comes from the wells. The only market, as far as this record shows, was for this gas at certain pressure and certain minimum water and hydrocarbon content. [Footnote omitted.]

296 F.2d at 387-88.

Exxon's situation is not unique, MMS argues, because it is common for gas produced offshore to be dehydrated at or near the lease prior to pipeline transportation onshore to a processing plant. The reason for such dehydration, prevention of pipeline corrosion and transmission problems, is the same as Exxon's, MMS states; moreover, dehydration also occurs in such cases at onshore gas processing plants, as at Shute Creek. The agency uniformly treats such dehydration costs on or near the lease as costs of marketability and lease operations, MMS states, and disallows deductions therefor in determining royalty values or transportation allowances.

Responding to appellant's reliance upon Marathon Oil Co. v. United States, *supra*, MMS argues that Exxon's situation is clearly

19/ See 30 CFR 206.100 (1986) and 43 CFR 3162.7-1 (1986) for a similar duty affecting Exxon.

distinguishable from that of Marathon. Costs of liquefaction incurred by Marathon were not costs of lease operation or marketability, but were solely costs of transportation, MMS states.

[1] We find merit in Exxon's position. Case law makes clear that if there is no open market in the place where an article would ordinarily be sold, then the market value of such article in the nearest open market, less cost of transportation to such open market, becomes the market value of the article in question. United States v. General Petroleum Corp., 73 F. Supp. at 263. Deduction of such cost is recognized by regulation 30 CFR 206.103 (1987), quoted supra, as one of the "relevant matters" that MMS must consider in valuing production. See Conoco, Inc., 110 IBLA 232, 242 (1989), and cases cited therein.

No market exists for the LaBarge sour gas stream in the field, and only after transportation and manufacture does a market exist for products of the gas stream. For methane and nitrogen, that market is at the tail-gate of Exxon's Shute Creek gas processing plant, whose situs was chosen by Exxon to satisfy environmental concerns and to more economically bring plant products to market. 20/

We believe it important that the Director consider the purpose of dehydration in determining whether an allowance is proper. In the instant

20/ Exxon's Request for Special Exceptions, Jan. 18, 1985, at 7 and 12.

case, dehydration at the central dehydration facility serves only one purpose: transportation. RVSD recognized this fact. Had the gas processing plant been closer to the field, the record shows, the central dehydration facility would not have been built. Had the central dehydration facility not been built, the cost of the Shute Creek gas processing plant would not have increased.

California Co. v. Udall is not contrary to appellant's position. As Exxon points out, the Court of Appeals was careful to state that no transportation or manufacturing costs were at issue there. In that case, the Federal operator had contracted to sell gas produced in its natural state from wells in the Romere Pass field, Louisiana, such gas to be suitable for pipeline transmission. The contract also specified maximum water content and liquefiable hydrocarbons and called for delivery at pipeline pressure. ^{21/} Because some of the gas produced in its natural state contained these substances in excess of the maxima, it was necessary to remove these excesses in order to put the gas in a condition suitable for pipeline transmission. Some 30 percent of the gas required compression. The gas was conditioned by the operator and delivered to the purchaser in the field _____

^{21/} The contract price was based on a gas that would not contain in excess of 0.007 lbs. water/mcf and in excess of 0.2 gallons liquefiable hydrocarbons/mcf. This gas would be delivered to the buyer's pipeline at a pressure selected by the buyer but not to exceed 800 lbs./sq. inch. California Co. v. Seaton, 187 F. Supp. 445, 446 (D.D.C. 1960), aff'd, 296 F.2d 384 (D.C. Cir. 1961). By way of contrast, dehydration at Exxon's gas processing plant reduced water content to 0.01 lbs. water/mcf, and its sales contracts called for a maximum of 5 lbs. water/mcf.

California Company did not contend that costs incurred to separate liquefiable hydrocarbons from the marketed gas were deductible.

within a short distance of the wells. The gas was not transformed by a manufacturing process. 296 F.2d at 386-87.

The compression and dehydration deduction denied to the operator in California Co. v. Udall represented costs which the market, i.e., the operator's contract, required to be incurred. In that case, as here, no dispute existed that a lessee was obliged by regulation to market its production. This duty was the underlying premise, the Court of Appeals found, for the Secretary's conclusion that the lessee was obligated to put its production in marketable condition. Having so concluded, the court described as reasonable the Secretary's definition of "production" as gas conditioned for market. Implicit in the court's opinion was the notion that a lessee who is obliged to put its production in marketable condition cannot look to its lessor for an allowance for conditioning costs. 22/

Exxon's dehydration of the LaBarge gas stream at its central dehydration facility was not performed to satisfy market specifications. Indeed, the record is plain that no market existed for the dried LaBarge gas stream, even at Shute Creek. Nor did dehydration at the central facility remove the need for further dehydration during the manufacturing process or lessen the costs of the Shute Creek gas processing plant.

To read California Co. v. Udall as precluding a deduction of dehydration costs in all circumstances is error. In Phillips Petroleum Co.,

22/ But see 3 Kuntz The Law of Oil & Gas § 40.5 (1967) at text accompanying footnote 40.

109 IBLA 4 (1989), this Board reached a similar conclusion involving a deduction of gathering and compression costs. Phillips incurred gathering and compression costs in delivering wet gas from its wells to its processing plants outside the field. Relying on California Co. v. Udall, MMS contended that such costs were incidental to marketing and, therefore, not deductible in valuing production. The Board disagreed and held that gathering and compression costs were not expenses incidental to marketing within the meaning of 30 CFR 206.106(b). ^{23/} While acknowledging that gathering and compression costs were not deductible as a manufacturing allowance, The Texas Co., 64 I.D. 76 (1957), the Board held that a deduction may be available for some of these expenses as a transportation allowance. To the extent that Phillips had incurred costs in moving wet gas from the field to its processing plants in order to extract liquid products and thereafter market production, MMS was directed to determine the amount of those expenses which are deductible as a transportation allowance.

Exxon's purpose in dehydrating the LaBarge gas stream at its central dehydration facility should have received greater consideration by the Director. Such considerations are not foreign to the Department, as revealed by the CDM in a different context at CDM § 647.7.3C:

In determining allowable costs, distinction must be made between: (1) expenditures by the operator for conditioning the products for market, which is an obligation of the operator and is not an allowable cost, and (2) expenditures directly related

^{23/} This regulation states in part: "[N]o allowance shall be made for boosting residue gas, or other expenses incidental to marketing."

to the extraction (manufacture) of the product or products. For example, an operator might expend 2 cents per Mcf to raise the pressure of wet gas on the lease, for the dual purpose of providing for the efficient extraction of gasoline, and for the delivery of the dry gas residue at a pressure sufficient to enter the purchasers' gas shipping line. In such a case, depending on actual conditions, only 1 cent per Mcf for boosting might be included in the allowable expenditures for extraction of the gasoline, the other cent being an obligation of the operator to put the residue gas in marketable condition. [Emphasis added.]

The Director's decision must be reversed insofar as it denied Exxon a transportation allowance for dehydration. We hold in this case that an allowance for all reasonable costs of dehydration at the central dehydrat-ion facility should have been recognized.

[2] Our decision to recognize a transportation allowance for all reasonable costs of dehydration at the central dehydration facility raises the issue whether the Director properly limited the transportation allow-ance that he granted based on the pipeline costs of transporting the LaBarge gas stream to Shute Creek. As noted above, this allowance was limited to 50 percent of the value of leased products at the nearest competitive sales point.

The Director relied upon CDM § 647.5.3E to support this 50-percent limit. This provision states in part: "Under no circumstances should transportation costs exceed 50 percent of the product's fair market value at the nearest competitive sales point." Although this limit is set forth without qualification, RVSD informed Exxon in its October 29, 1984, decision that if Exxon believed that relief from the 50-percent

ceiling was justified by convincing information, it might consider filing "an application" with the agency.

Exxon challenges this 50-percent limit and argues that its actual transportation costs in future years may well exceed 50 percent of the value of CO₂, methane, and sulfur. In support of this challenge, appellant calls our attention to Supron Energy Corp., 46 IBLA 181 (1980), wherein this Board stated that the CDM does not have the force of law.

Supron considered, *inter alia*, whether CDM § 647.7.3E(9) properly limited a permittee's deduction of general and administrative overhead costs to 10 percent of other operating and maintenance costs. The Board stated that although the Conservation Division Manual does not have the force of law, a decision based upon it would not be disturbed in the absence of figures clearly showing that 10 percent was an inadequate deduction.

MMS defends its 50-percent limit by reiterating that the Secretary is authorized by statutes, regulations, leases, and cases construing these authorities to establish minimum royalty values. This limitation on Exxon's transportation deduction is simply a means of establishing a minimum royalty value, MMS contends. While the Secretary may relax this policy, MMS states, Exxon has made no showing why this regularly applied policy should be waived here.

When valuation of production is challenged, an appellant must not merely show that the methodology is susceptible to error, but that an error did, in fact, occur. Phillips Petroleum Co., 109 IBLA at 7. Appellant suggests that the 50-percent limitation may deny it legitimate deductions, but has assembled no data in support of its concern. In the absence of such data, we will not disturb the 50-percent limit imposed by the Director and RVSD on pipeline costs. See Supron Energy Corp., 46 IBLA at 196. 24/

[3] A major part of the SOR focuses upon the Director's decision to limit Exxon's processing allowance to 66-2/3 percent of the value of "such additional products," i.e., nitrogen, CO₂, and sulfur, and to deny any such deduction against the value of methane. The basis for Exxon's appeal of this ruling has been set forth supra: the Government's equity in leased gas is confined to the value of raw material, and hence the Government is owed royalty only on the reasonable value of the LaBarge gas stream at the lease. Both the Director and appellant rely on the same case for their contrary positions, United States v. General Petroleum Corp., supra.

Appellant refers to United States v. General Petroleum Corp. as the Kettleman Hills case because this controversy focused upon oil and gas

24/ In the Findings and Conclusions adopted by the Assistant Secretary, Land and Minerals Management, on Oct. 19, 1988, RVSD states at 21: "When allowed pre-plant transportation costs, properly allocated by volume, are combined with post-plant transportation costs, the 50 percent allowance limitation (as applied against sales value) is not met for any product. Therefore, MMS concludes that an exemption to this limit is not warranted." (Emphasis added.) This conclusion by RVSD responded to Exxon's royalty valuation proposal calling for, inter alia, allocation of pre-plant transportation costs on the basis of value.

produced from the Kettleman Hills field in California. ^{25/} At issue was the Secretary's authority to establish minimum limitations upon valuations of oil and gas for royalty purposes. 73 F. Supp. at 220. Gas produced from the Kettleman Hills field was processed in an extraction plant to yield natural gasoline and dry residual gas (residue gas). At the LaBarge Project, methane is regarded as a residue gas upon extraction of nitrogen, CO₂, hydrogen sulfide, and helium from Exxon's sour gas stream.

Exxon states that United States v. General Petroleum Corp. upholds section 4(d) of the 1926 regulations ("The Government does not wish to collect royalty on that part of the value which is derived from the cost of manufacturing") and provides that an allowance must be made for manufacturing costs in order to determine the value of gas as produced at the lease. In support, it quotes from 73 F. Supp. at 254:

Natural-gas royalties are payable on the gas as it is produced at the well. It is the value of the gas which must be determined. Ordinarily the gas as produced contains a certain amount of "casing-head" gasoline. If the gas is processed in an extraction plant, two products result, the natural gasoline and dry residual gas. Since part of the value of the gasoline and dry gas so manufactured is attributable to the extraction process, allowance must be made for the manufacturing costs in order to arrive at the value of the gas as originally produced. [Emphasis added.]

^{25/} The Senate Committee on Public Lands and Surveys noted that "Kettleman Hills * * * is regarded as one of the world's greatest oil and gas fields." S. Rep. No. 1087, 71st Cong., 2d Sess. 3 (1930). Competitive offset drilling there caused natural gas to be wasted in an amount reaching a "daily total of 400,000,000 [cubic] feet." Id. at 2. To avoid this waste, Congress passed the Act of July 3, 1930, ch. 584, 46 Stat. 1007, authorizing Federal lessees, who occupied 30 percent of the area of the field, to participate in a cooperative (unit) plan for rational development and operation of the field. Such a plan was formed, and lessees transferred their operating rights to a single body, the Kettleman North Dome Association. United States v. General Petroleum Corp., 73 F. Supp. at 231-32.

Appellant charges that the Director's reliance upon United States v. General Petroleum Corp. to limit a manufacturing allowance to the costs of producing "such additional products" is misplaced. Nowhere does the district court use such language, Exxon states. Two products resulted from the Kettleman Hills gas because "manufacture of the liquids [natural gasoline] necessarily simultaneously manufactured the dry gas" (SOR at 27). The cost of manufacture there, two-thirds of the value of liquids, was the cost to the lessee of manufacturing both products, Exxon argues. "As a matter of administrative convenience and reflecting historical and business realities 100% of the manufacturing costs were defined as two-thirds of the value of liquids." 26/ Id. (Emphasis added.)

26/ In support, appellant offers an historical sketch of the dry gas market, noting that in 1920 dry gas produced was frequently without value due to a lack of means to transport it to market. Gas that contained hydrocarbon liquids in sufficient quantity had value to the extent of its "natural gasoline" or "casing-head gasoline" content (SOR at 26). Section 16 of the Department's 1920 regulations reflected this fact, Exxon states, by valuing casing-head gas at one-third of the value of marketable casing-head gasoline extracted therefrom. 47 L.D. 552, 555 (1920).

Because the dry gas manufactured was assumed to be a waste product, the cost of manufacture was defined reasonably as a percentage of the value of the liquids removed. This assumption was consistent with the typical gas processing agreement under which a lessee would "pay" in kind two-thirds of the liquids removed as compensation to the processor and retain one-third of the liquids and all of the dry (residue) gas (SOR at 26-27).

Section 4(d) of the Department's 1926 regulations, quoted supra, reflected an increasing potential market for manufactured residue gas, Exxon states. This regulation valued the raw gasoline in the natural gas as produced at one-third of the value of the marketable natural-gas gasoline, the remaining two-thirds being allowed to the lessee for the cost of manufacture. 52 L.D. at 11. If a market existed for the dry residual gas from the natural-gas gasoline plant, royalty would also be due on this product (SOR at 28).

From the above facts, Exxon concludes:

"In that context, of course, it is perfectly reasonable to collect royalty on 100% of the value of the residue gas because the entire cost of its manufacture had already been deducted from the value of the liquids. Any increase in the value of residue gas returned to the lessee by a gas

Exxon's challenge to the Director's manufacturing allowance relies also on Marathon Oil Co. v. United States, supra, which case affirmed MMS' authority to require Marathon to recalculate the value of its production. Marathon had been calculating value based on the Phillips formula, which provided that Marathon pay royalty on 36 percent of the landed price per Mmbtu of liquefied natural gas in Japan (and effectively granted Marathon an allowance equal to 64 percent of the landed price per Mmbtu for post-production costs). When the price of gas rose (thereby increasing Marathon's allowance), MMS ordered Marathon to recalculate the value of production by subtracting certain actual costs, instead of a fixed percentage (64 percent), from the sales price. 807 F.2d at 762.

Exxon argues that MMS should do here what it did in Marathon:

[I]t replaced the inaccurate formulaic definition of liquefaction and transportation costs by a "true gross proceeds" method. The

fn. 26 (continued)

processor increased the actual net realization of the lessee. The deduction was only defined as a percentage of liquids removed as the liquids were originally the most, indeed the only, valuable product of the gas stream and to reflect the manner in which the lessee typically paid for the processing. The intent and result was to deduct the entire cost of manufacturing as required by the nature of the Government's limited equitable interest in the leased gas." (SOR at 28 (emphasis in original)).

To like effect is Exxon's Exhibit L at 2, a letter to the Secretary, dated Jan. 29, 1947, wherein the Director, Geological Survey, states at page 2: "The 1936 regulations [calling for royalties on one-third of all casinghead or natural gasoline (or the lessee's portion if greater) and 100 percent of dry residue gas], however, are based on the premise that the entire cost of manufacturing will be reflected in the portion of the liquids retained by the processor" (emphasis added).

As to the administrative convenience of the two-thirds allowance provided by section 4(d) of the 1926 regulations, appellant refers to the Acting Secretary's net realization order of June 7, 1937, 56 I.D. 462, 464, which states in part: "The two-thirds allowance formula has been used because of the simplicity of its administration and because its basis has generally been in accordance with the facts."

method for determining true gross proceeds was described with admirable accuracy and clarity as deducting from the contract value or gross proceeds "all costs and expenses incurred in processing, storing and transporting the products between the point of sale and the lease." [27/] [Emphasis added.]

(SOR at 21). The Kettleman Hills case and 30 CFR 206.103 require this same result, appellant states.

If the Director's formula limiting a manufacturing allowance to 66-2/3 percent of the value of nitrogen, CO₂, and sulfur is used, Exxon predicts that only 43.5 percent of its actual manufacturing costs for 1987 will be deductible (SOR at 20).

MMS reads the Kettleman Hills case and Marathon as recognizing the Secretary's authority, and considerable discretion, to establish the value of production for royalty purposes. 28/ Indeed, MMS points out that Marathon cited the Kettleman Hills case in construing 30 CFR 206.103, supra:

"The thrust of the regulation is that the value for royalty computation purposes set by the [MMS] Associate Director must be reasonable. The only specific requirement in the regulation is

27/ Language quoted by appellant in the final sentence appears in correspondence, dated Feb. 28, 1983, from the Chief, RVSD, to Marathon Oil Company (Exh. D of Appellant's SOR).

28/ Exxon's lease is to the same effect at section 2(d)(2):

"It is expressly agreed that the Secretary of the Interior may establish reasonable minimum values for purposes of computing royalty on any or all oil, gas, natural gasoline, and other products obtained from gas, due consideration being given to the highest price paid for a part or for a majority of production of like quality in the same field, to the price received by the lessee, to posted prices, and to other relevant matters."

that this value be no less than 'gross proceeds.' Thus this regulation vests considerable discretion in the Associate Director to decide what the 'reasonable value' for royalty purposes shall be." [Footnote omitted.]

(Answer at 7-8, quoting from 604 F. Supp. at 1382). Courts have long recognized the Secretary's authority under the statutes, leases, and regulations to establish a value greater than the lessee's proceeds, MMS notes.

MMS acknowledges that Exxon's processing will enhance the value of the LaBarge gas stream and that a reasonable allowance is warranted. The key issue, MMS states, is whether the agency has established a reasonable method for computing the allowance. Exxon's processing allowance is consistent with the policy behind 30 CFR 206.106 (1987), 29/ which grants an allowance for manufacturing "wet gas" not to exceed two-thirds of the value of the liquid products and provides no deduction against the value of the dry residue gas 30/ (Answer at 14-15). This two-thirds formula has been in the rules since 1920, MMS states, and has been upheld in several decisions, including the Kettleman Hills case.

29/ This regulation states in part:

"A royalty as provided in the lease shall be paid on the value of one-third (or the lessee's portion if greater than one-third) of all casinghead or natural gasoline, butane, propane, or other liquid hydrocarbon substances extracted from the gas produced from the leasehold. The value of the remainder is an allowance for the cost of manufacture, and no royalty thereon is required. The value shall be so determined that the minimum royalty accruing to the lessor shall be the percentage established by the lease of the amount or value of all extracted hydrocarbon substances accruing to the lessee under an arrangement, by contract or otherwise, for extraction and sale that has been approved by the Associate Director."

30/ "Wet gas" is natural gas containing liquid hydrocarbons in solution, which may be removed by a reduction of temperature and pressure or by a relatively simple extraction process. "Dry gas" is natural gas which does not contain dissolved liquid hydrocarbons. 8 Williams and Meyers, Oil & Gas Law 1076, 283 (1987).

Regardless of the historical antecedents of the two-thirds formula, MMS argues, it is too late in the day for Exxon to now argue that the agency may not limit processing allowances to an amount less than the actual costs to the lessee. MMS observes that Exxon devotes considerable attention to the proposition that determining gross proceeds involves deducting all processing costs. Exxon's reliance upon Marathon for the argument that value for royalty purposes equals gross proceeds is, however, misplaced, the agency states. Marathon upheld the proposition that value for royalty purposes cannot be less than gross proceeds, MMS contends. Thus, the gross proceeds measure of value is a minimum, not a maximum (Answer at 16).

MMS argues that if value were to be at gross proceeds, no discretion would have been allowed by 30 CFR 206.103 or recognized by Marathon. Limiting Exxon's processing allowance is simply an exercise of the Secretary's well-recognized authority to establish reasonable minimum values, MMS contends, even if those values are in excess of gross proceeds.

No deduction against the value of methane is proper, MMS states, because California Co. v. Udall requires Exxon to market its production and to incur the costs to make its product marketable. If processing also results in further benefits to the lessor in that additional products with greater value are also marketable (e.g., CO₂ and nitrogen), Exxon is entitled to an allowance for the costs of manufacturing these products, subject to limitation (Answer at 22).

No regulation specifically addresses how MMS should value a sour gas stream that, as here, yields no liquid hydrocarbons upon manufacture, but instead methane, nitrogen, CO₂, sulfur, and helium. Confronted with this fact and Exxon's petition of March 23, 1984, the agency found an analogy in its well-established method of valuing wet gas. This method, which limits a manufacturing allowance to two-thirds of the value of the liquid products (30 CFR 206.106 (1987)), was well established because of its simplicity and because it was "generally * * * in accordance with the facts." Net realization order of June 7, 1937, supra note 26. When this two-thirds formula provided too generous a deduction (allowance) to a lessee, whether by reason of escalating product prices or manufacturing efficiencies, the Department curbed this deduction by requiring the lessee to deduct "actual costs of manufacture." United States v. General Petroleum Corp., 73 F. Supp. at 255; see also Shell Offshore Inc., 111 IBLA 350, 351 (1989); Phillips Petroleum Co., 109 IBLA at 9; Kerr-McGee Corp., 106 IBLA 72, 77 (1988). Cf. Marathon Oil Co. v. United States, 807 F.2d at 762. Thus, we understand the phrase "generally * * * in accordance with the facts" to mean that the formula granted an allowance approximating actual costs of manufacture.

The Director's analogy to the wet gas valuation regulation would be appropriate if the two-thirds formula approximated Exxon's reasonable costs of manufacture. Actual 1987 figures reveal, however, that the processing costs of CO₂ and nitrogen exceeded 100 percent of their tailgate values, respectively; processing costs of sulfur approached, but did not exceed, this 66-2/3 percent limit. 31/ In light of Exxon's projections and actual

31/ RVSD Findings and Conclusions at 21, adopted by the Assistant Secretary, Land and Minerals Management, on Oct. 19, 1988.

1987 processing costs and tailgate values, we conclude that the two-thirds formula is inadequate to approximate Exxon's actual costs of manufacture. The Director's decision requiring use of this formula is, accordingly, reversed in this respect.

That this formula should prove inadequate is not surprising because the formula is grounded in the premise that Exxon is obliged to place the principal product of its gas stream (methane) in a marketable condition, albeit by manufacture, at no cost to the lessor. ^{32/} As such, the allowance applies only to nitrogen, CO₂, and sulfur and excludes methane in its calculations. We find no basis in the cited cases for this premise.

To begin, we find that 43 CFR 3103.3-1(c) (1986) is directly contrary to this premise. The terms of this regulation bear repeating: "In determining the * * * value of gas and liquid products produced, the * * * value shall be net after the cost of manufacture. The allowance for cost of manufacture may exceed two-thirds of the * * * value of any product only with the approval of the Secretary." [Emphasis added.] These terms also appear in Exxon's lease W-51423.

^{32/} At page 19 of its Answer, MMS states:

"MMS does not take issue in this case with the proposition that Exxon is entitled to an allowance for manufacturing or transportation. However, MMS does maintain that it may reasonably limit the amount of such allowances. This is particularly so when limitations reflect other well-established principles. One such principle is that the lessee is obligated to make the principal product marketable at no cost to the lessor." [Footnote omitted.]

That a residue gas (such as methane) is a "product" of manufacture is clear. RVSD and the Director each refer to methane as a product. ^{33/} The Kettleman Hills case is also in accord: "If the gas is processed in an extraction plant, two products result, the natural gasoline and dry resid-ual gas." ^{34/}

The Director relies upon California Co. v. Udall for the premise that Exxon is obliged to place methane in a marketable condition at no cost to the lessor, but we do not read this case so broadly. The Circuit Court of Appeals made clear in that case that no manufacturing allowance was at issue: "Let us here insert a cautionary parenthesis. No transportation costs are involved in this case. * * * Neither are manufacturing costs involved here. The product was not transformed by a manufacturing process." 296 F.2d at 387. (Emphasis added.) Thus, we read California Co. v. Udall to distinguish between those operations that condition a product for mar- ket, for which a lessee is not entitled to an allowance, ^{35/} and those that transform it. If transformation is involved, a manufacturing allowance is appropriate. Davis Exploration, 112 IBLA 254, 259 (1989), appeal docketed,

^{33/} RVSD Decision at 2; Director's Decision at 10.

^{34/} United States v. General Petroleum Corp., 73 F. Supp. at 254. See also regulation 25 CFR 171.13(a), as set forth in Supron Energy Corp., 46 IBLA at 186.

^{35/} Examples of these operations are compression, dehydration, and gathering. California Co. v. Seaton, 187 F. Supp. at 447. Compression and gathering costs may, however, be deductible as a transportation allowance, Phillips Petroleum Co., 109 IBLA at 13, and compression costs may be deductible as a manufacturing allowance, CDM § 647.7.3c. Dehydration costs may be deductible as a transportation allowance, supra. Costs associated with the removal of excess hydrocarbons, while mentioned by the Circuit Court in California Co. v. Udall, 296 F.2d at 386, were not deducted by California Company and were never at issue. See note 21, supra.

No. 90-0071 (D. Wyo. Mar. 19, 1990); see also Marathon Oil Co. v. United States, 604 F. Supp. at 1386.

There is no dispute that Exxon's activities at its Shute Creek gas processing plant involve manufacture of the LaBarge gas stream. The Director noted: "The selective separation of the various components of the Riley Ridge gas stream requires a series of relatively complex manufacturing processes" (Director's Decision at 2). ^{36/} (Emphasis added.) We conclude, therefore, that the Director's reliance upon California Co. v. Udall in the instant case for the proposition that appellant is required to place methane in a marketable condition without the benefit of an allowance was error.

Our conclusions above do not diminish the principle, often cited by MMS, that the Secretary has considerable discretion to establish the value of production for royalty purposes. To this principle we add that when such discretion is exercised, a reasonable basis for the action taken must exist. Phillips Petroleum Co., 109 IBLA at 15; Supron Energy Corp., 46 IBLA at 187. Where, as here, valuation of an atypical gas stream is involved, the exercise of this discretion may call for a creative approach, rather than resort to an ill-fitting model. See California Co. v. Seaton, 187 F. Supp. at 449 n.1.

^{36/} "There is no question in the instant case that Exxon had to process the gas in order to make the principal product, i.e., methane, marketable" (Answer at 20). "The processes utilized at the LaBarge facilities to manufacture each individual product are interrelated and one process may apply to multiple products" (RVSD Findings and Conclusions at 20, adopted by the Assistant Secretary, Land and Minerals Management, on Oct. 19, 1988).

Marathon instructs that the net back method, whereby actual dollar-specific costs are deducted from sales price, satisfies the gross proceeds requirement of 30 CFR 206.103. 604 F. Supp. at 1385. It also acknowledges that gross proceeds is a minimum valuation. Id. at 1382. MMS may, accordingly, value production in excess of the amount reached by the net back method. Should it exercise its discretion to do so, Supron Energy Corp. requires that the agency provide a reasonable basis in the record for its action.

Finally, Exxon included in its SOR a request for a hearing, oral argument, and conference. In light of the thorough nature of the briefing, this request is denied.

To summarize our holdings: the Director's decision of January 7, 1986, is reversed in part insofar as it denied a transportation allowance for costs incurred in dehydrating the LaBarge gas stream at Exxon's central dehydration facility and insofar as it limited a manufacturing allowance to two-thirds of the value of all products except methane; the Director's decision is affirmed in part insofar as it limited (to 50 percent of product values) a transportation allowance for pipeline costs incurred in transporting the LaBarge gas stream to Shute Creek; and appellant's request for a hearing, oral argument, and conference is denied.

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decision of the

Director is reversed in part, affirmed in part, and the case is remanded to the Director for preparation of new standards consistent with this opinion.

Administrative Judge

Gail M. Frazier

I concur:

Bruce R. Harris
Administrative Judge