A Twelve-Step Program for COPAS to Strengthen Oil and Gas Accounting Protections

John Burritt McArthur

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A TWELVE-STEP PROGRAM FOR COPAS TO STRENGTHEN OIL AND GAS ACCOUNTING PROTECTIONS

John Burritt McArthur*

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* B.A. Brown University, 1975; M.A. (economics) University of Connecticut, 1978; J.D. University of Texas, 1984; M.P.A. The Kennedy School of Government, 1994. The author currently maintains a solo practice in Berkeley, California and is enrolled in the Ph.D. program in public policy at the University of California.

The author has litigated oil and gas cases for over 12 years. He has represented both operators and non-operators in litigation over oil and gas investments. His interest in industry accounting matters was sparked by litigation in which he was one of the counsel representing a subsidiary of the Aetna Insurance companies against Davis Oil Company of Denver and its principal, Marvin Davis. The author also represented three individual defendants in the Longhorn Oil litigation discussed in footnote 43 infra. His former law firm, Susman Godfrey, served as plaintiffs' counsel in the other cited cases, the Invol litigation discussed in notes 59 and 90 infra, the Altheide v. Meridian Oil, Inc. case discussed in footnote 46 infra, and the posted price case also discussed in footnote 46 infra.

The late John Jolly, the former executive director of COPAS, was one of Aetna's experts in the Davis Oil litigation. While the views expressed here are solely the author's, he developed many of his views after discussions with Mr. Jolly about the neither-gain-nor-lose philosophy embedded in the various COPAS forms.

This Article is an offshoot of a book in progress on oil and gas investment standards. The book will discuss reserve disclosure standards as well as accounting issues.

This Article reflects the contributions of many people who have contributed information or comments, or both, to that work. Foremost among them (in addition to John Jolly) are Gerald Bader, John Bohn, Howard Boigon, Thomas Coghill, Andrew Derman, Phil Doty, Frank Douglass, Alice Flusser, Gene Gallegos, Robert Green, Everett Holseth, Jim Kronzer, Frank Leggio, Robert Malone, Robert Minerich, Bob Pezold, Colette Poeppel, David Richman, Jan Riley, Craig Shephard, Don Silberman, Mike Stinson, Jon Wallis, Mark Wawro, and Michael Zeeb.

Many of the people listed share the typical industry opposition to giving the operator any new duties. The views expressed here are entirely, and enthusiastically, the author’s own.
This Article addresses the protection oil and gas investors receive under the standard oil and gas accounting form. The need to standardize industry accounting practices in order to provide fair and reliable standards of behavior has been of concern to industry accountants since 1926, when a group of oil and gas accountants assembled in Los Angeles to discuss industry standards. The resulting organization, the Counsel of Petroleum Accountant Advisors Society (“COPAS”), became a national organization in 1961.1


John Jolly and Jim Buck describe the successive renditions of the COPAS form in JOLLY & BUCK, supra, at 69-70. The initial form was a combination of various regional forms. In addition to the discussion by John E. Jolly and Jim Buck, see Clorval Cook, The Accounting Procedure of Joint Operating Agreements, 1971 NAT'L INST. PETROLEUM LANDMAN 193, 193-94; C.M. Kennedy, Joint Venture Accounting a la COPAS—1962, 1964 NAT'L INST. PETROLEUM LANDMAN 157, 157-59. COPAS issued the first industry-wide accounting form in 1962; the current onshore form is the 1984 rendition. Jolly, supra, at 21-3. COPAS is only now issuing its 1995 COPAS form.

There has been little litigation on industry accounting issues, even though hundreds of millions of dollars changes hands under COPAS guidelines every year. One reason is that many disputes are successfully channeled into the COPAS claims resolution process. Another is that many forms of operator self-dealing are difficult to discover and go undetected. The lack of detection is accentuated by COPAS’ punitive claims limitations provisions, discussed in part I infra, that forfeit claims not brought within unusually short time periods.
COPAS has issued a succession of accounting forms which serve as the primary source of oil and gas accounting standards. The 1984 COPAS form regulates most operators' behavior in today's oil and gas investments. COPAS has just issued a 1995 form designed as an alternative, accordingly, it should not be surprising that there has been very little writing on the COPAS forms. The most comprehensive discussions are in the book by COPAS' long-time executive director John Jolly and Jim Buck and the article by John Jolly on the COPAS form supra. For other discussions of COPAS, see Cook, supra; R.M. Cunningham, Oil and Gas Accounting Procedure as Viewed by a Joint Interest Operating Director, 13 ROCKY MTN. MIN. L. INST. 397 (1967); Granville Dutton, Accounting Procedures: Contracts or Controversies?, 19 ROCKY MTN. MIN. L. INST. 117 (1974); J. David Heaney, Joint Operating Agreements, The AFE and COPAS—What They Fail to Provide, 29 ROCKY MTN. MIN. L. INST. 743 (1983); Kennedy, supra; and Andrew Derman, The New and Improved 1989 Joint Operating Agreement: A Working Manual 213-37 (1991) (discussing COPAS accounting exhibit).

A few articles that focus primarily on nonaccounting portions of the JOA address one or more COPAS issues. See Howard L. Boigon, The Joint Operating Agreement in a Hostile Environment, 38 INST. OIL & GAS. L. & TAX’N 5-1, § 5.04(2) (1987) (discussing limits on costs an operator can bill to a joint account); Robert C. Bledsoe, Current Problems Between Operators and Non-Operators in Operating Agreements, 40 INST. OIL & GAS. L. & TAX’N 8-1, § 8.03 (1989) (discussing high overhead problems in the operation of marginal properties); id. § 8.05(1) (discussing whether an operator can commingle funds); William A. Keefe, The Oil and Gas Joint Operating Agreement: Unraveling Some Knots, 36 ROCKY MTN. MIN. L. INST. 18-1, § 18.02 (1990) (dealing with operator costs and AFE issues); Patricia Moore, Joint Operating Agreements—Is There Really a Standard that Can Be Relied Upon?, 5 E. MIN. L. INST. 15-1 (1984) (discussing AFE and advance payment issues); Ernest E. Smith, Duties and Obligations Owed by An Operator To Non-Operators, Investors, and Other Interest Owners, 32 ROCKY MTN. MIN. L. INST. 12-1, § 12.03 (1986) (discussing AFE and other issues about an operator's incurring expenses); J.O. Young, Oil and Gas Operating Agreements: Producers 88 Operating Agreements, Selected Problems, and Suggested Solutions, 20 ROCKY MTN. MIN. L. INST. 197, 203-08 (1975) (discussing AFE issues).

Most of the writing about COPAS has been by people working for industry companies or by academics who consult for industry companies. Loyalty to their company may be one reason why there can be a certain lack of directness in discussions of the conflict between operators and non-operators, see, e.g., Cunningham, supra, at 398 (COPAS language “is clear in intent and innocent of advantages of the operator or to the non-operator”); Dutton, supra, at 124, 135 (arguing major audit exceptions arise only from differences in interpretation); cf. Moore, supra, at 15-2 to -4 (discussing pressure on COPAS to change from “ignorance of some industry novices” and erosion of custom “due to the business-ignorance of a significant number of its current constituency,” as if outsider ignorance, rather than fundamental conflict between operator and non-operator, caused standard form shortcomings). This is the same mindset that views the purpose of COPAS as merely codifying existing industry practices, as if there was no real difference of opinion over appropriate standards. See infra note 122. What is lost is an appreciation of the need to constrain operators so that they act in the interests of the joint account, rather than solely in their own interest.

2. Any discussion of standards governing oil and gas projects is really a discussion of the standards that will constrain the behavior of the “operator” actively running the investment. An operator is “[a] person, natural or artificial (i.e., corporate), engaged in the business of drilling wells for oil and gas.” Howard Williams & Charles Meyers, Manual of Oil and Gas Terms 842 (1991).

The “non-operator” most frequently discussed in debates over investment standards is the non-operating equity owner, the “working interest owner.” But investors who purchase interests in drilling funds and partnerships and royalty owners are just as dependent upon the operator as equity investors. They too contribute items of value to the common project and their economic fate depends just as fully as an equity owner’s on the operator’s care and skill in finding production. All of these parties are partners in a common venture. This Article will at times refer to non-operators as investors or partners,
even though there is an ongoing dispute about whether non-operators are partners in the legal sense. The industry has tried to escape partnership and other fiduciary duties by disclaiming them in the 1989 Joint Operating Agreement ("JOA"). American Association of Petroleum Landmen, 1989 Model Form Operating Agreement art. VII.A [hereinafter "1989 JOA"]).

For the best general discussion of the overall operator-non-operator relationship within which the COPAS form is lodged, see Smith, supra note 1. Andrew Derman provides the most thorough review available of the Joint Operating Agreement, under which the bulk of oil and gas investments occur. Derman, supra note 1.

The other major issue that bears on the operator's duty, but which is not discussed in this Article, is whether the operator is a fiduciary even without the 1989 disclaimer. This issue is addressed in Smith, supra note 1, § 12.02. Smith agrees that the standard operating agreement bears the indicia of a joint venture, which is a fiduciary relationship. Id. at 12-14 ("One can, I think, safely start with the assumption that in the absence of other factors modifying the relationship, the operator owes a fiduciary duty to the non-operators with respect to the ventures contemplated by their agreement."). But Smith appears to conclude that this question can only be answered on a case-by-case basis. "This is, however, merely the starting point. Almost invariably other factors will be present which must be examined to determine how they affect the operator's obligations." Id. Smith lists contract provisions, the location and type of activity, and the "individual fact pattern" as factors that may vary the outcome. Id. at 12-14 to -16.

The necessary background reading on this issue is Howard R. Williams, The Fiduciary Principle in the Law of Oil and Gas, 13 Inst. on Oil & Gas L. & Tax’n 201 (1962). Howard Williams read the caselaw 30-plus years ago as indicating that "[f]iduciary principles are usually applicable to most forms of joint endeavor, whether described as a partnership or in less formal terms." Id. at 274.

Whenever the owner of an interest in oil and gas has a power with respect to another person's interest in oil and gas, the courts are quick to imply a duty in connection with the exercise of such power. Power begets responsibilities and duties. A fiduciary principle becomes applicable. Id. Accord, Howard L. Boigon, Liabilities and Relationships of Co-owners Under Agreements for Joint Development of Oil and Gas Properties, 37 Inst. on Oil & Gas L. & Tax’n 8-1, at 8-20 (1986) ("[I]n states other than Texas the conduct of operations under a typical joint operating agreement or other comparable arrangement will likely lead to findings of fiduciary responsibilities between the co-owners ... "); cf. Boigon, supra note 1, at 5-5. ("The JOA, even in its unaltered form, has been construed by the courts in most states—with the notable exception of the Texas courts—to create something more than a passive cotenancy or a mere service contractor relationship."); Christopher Lane & Catherine Boggs, Duties of Operator or Manager to its Joint Venturers, 29 Rocky Mtn. Min. L. Inst. 199, 209 (1983) ("The problem . . . that [joint operation] relationships pose is that as soon as any element of control or voice in operational decisions is shared, all the characteristics of the joint venture or mining partnership are present: (1) joint ownership; (2) co-operation/joint operation; and (3) agreement to share profits and losses. Absent a contractual provision to the contrary, it is highly likely that a court would hold that a joint venture or mining partnership exists.").

The judicial shift to a fully developed fiduciary theory, however, seems to have been frozen. It is probably correct to say that most courts end up treating the operator as a fiduciary, but only after choosing among a variety of theories to get to that route (primarily, joint venture theory, mining partnerships, ordinary partnerships, trustee, or agency), and sometimes leaving the operator's duty as a fact issue.


The 1989 JOA tries to disclaim the fiduciary duty as noted above, but there is no caselaw discussing whether such disclaimers can be effective. 1989 JOA, supra note 2, art. VII.A. For arguments that a blanket disclaimer is not likely to be enforced, see Lane & Boggs, supra, at 228-38 (urging parties wanting to disclaim any duty to disclaim specific duties or acts, because disclaimer of an overall duty is likely to be ineffective).
rather than a replacement, to prior accounting forms.3

The COPAS form and the Joint Operating Agreement ("JOA") to which it is an exhibit govern the majority of oil and gas investments.4 The forms also define the primary terms of these investments. Moreover, the venture of constructing such a model form assumes that in the repetitive investment structures of the oil and gas industry, the major areas of likely disagreement can be specified and defined by contract. It is, of course, true that because contracts subsist within a larger world of informal relationships, it is unwise to expect that the exact pattern of relationships will follow a contract's skeleton. In dealing with companies, for instance, "the distinction between the 'formal' and the 'informal' organization of the firm is one of the oldest in the literature, and it hardly needs repeating that observers who assume firms to be structured in fact by the official organization chart are sociological babes in the woods."5 It is just as true that patterns of actual performance often will depart from contract terms.6 Yet the COPAS accounting provisions establish the financial

3. Each COPAS form will be cited by year of promulgation. This Article generally cites the 1984 COPAS because it governs most current investments. Given COPAS' lukewarm endorsement of its 1995 form, it is not clear how many investments will ever fall under that form.

4. It is widely recognized that the JOA, which in its standard format includes the COPAS form as Exhibit C, is the controlling document for oil and gas investments. See, e.g., Derman, supra note 1, at 1 (the AAPL procedures govern "tens of thousands" of wells); Boigon, supra note 1, at 5-1 (JOA is "typically used to govern joint exploration and development of oil and gas properties"); Boigon, supra note 2, at 8-3 to -4 (JOA is "the instrument which both attorney and client ordinarily anticipate utilizing to conduct joint development operations"); Cook, supra note 1, at 201 (writing in 1971 that "[t]he modern standard form available is the COPAS-1968 Accounting Procedure, which has been accepted by most companies"); Dutton, supra note 1, at 118-19 (COPAS is "the chief policy maker on accounting procedures. In 1962, the Council developed the COPAS-1962 form which rapidly became the standard procedure for joint operations in the petroleum industry"); Keefe, supra note 1, at 18-2 (The "model form is used in nearly every domestic, multiple party venture for the onshore drilling of oil and gas. No other instrument employed in the exploration and production business receives acceptance even approaching that accorded the A.A.P.L. paradigm."); Moore, supra note 1, at 15-1 ("As complex as the oil and gas industry appears to be, and as diverse as arrangements between oil and gas companies tend to be when dealing with the drilling of a joint interest well, it is amazing that, over a quarter of a century, there has risen upon a Model Form Operating Agreement to cover the drilling and subsequent operation of joint venture wells."); Young, supra note 1, at 199 ("A.A.P.L. Form 610 has gained such general acceptance, even by major companies, that it may be considered a Standard Operating Agreement.").

Even as drilling shifts overseas, these forms retain their significance because American companies continue to lead the world oil and gas industry. The propagation of U.S. contract forms has proven another valuable American export. Consider, for instance, the grounding of the model form that Andrew Derman proposes for international operations in the standard domestic form. See ANDREW DERMAN, INTERNATIONAL OIL AND GAS JOINT VENTURES: A DISCUSSION WITH ASSOCIATED FORMS (1992).


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structure of the investment and, in addition, contain very specific terms for the most common areas of difficulty. The provisions also channel the course of settlement in the many disputes that never reach the courts. This form contract effectively determines the outcome of the most important accounting issues in oil and gas investing.

The various COPAS forms represent a tremendous advance for the oil and gas industry. The forms have imposed a regular structure on the majority of equity oil and gas investments, standardizing practices that would be far too costly for parties to negotiate in every new investment. COPAS has lowered the cost of investing by removing the need to negotiate each deal from the ground up. 7

7. See Dutton, supra note 1, at 118. “Through the use of these model forms, the productivity of those industry employees engaged in negotiating and conducting joint operations is greatly enhanced in that the number of items which must be negotiated and monitored are reduced to a feasible level.” Id. Dutton adds that “[i]n addition to diminishing decisions and detailed checking, the model procedures provide a basis for a common vernacular and a uniform connotation of the terms and jargon used in joint interest accounting.” Id.; cf. Kennedy, supra note 1, at 159 (describing the “accounting nightmare” and “chore” that would result “if you were required to originate this detail for each operating agreement”).

Part of a standard form’s efficiency may result simply because everybody uses the same form. Transaction costs can fall sharply because everyone can rely on the same operating procedures. Companies orient the structure of their services to the accepted standard. Certain issues drop from discussion because everybody knows how they will be treated. Thus, there is a social value in most or all parties using the same forms and channeling their needs into the same practices. In this sense, the first technology or contract form to arrive on the scene may become the chosen technology simply because it enjoys increasing returns to scale as it is adopted by increasingly larger groups. See Brian Arthur, Competing Technologies, Increasing Returns, and Lock-In by Historical Events, 99 ECON. J. 116 (1989); Brian Arthur, Positive Feedbacks in the Economy, 262 SCI. AM. 92 (Feb. 1990). Using a common form often reduces transactions costs, sometimes sharply, but the savings do not mean that the parties chose the form that would reduce costs the most. “[O]nce random economic events select a particular path, the choice may become locked-in regardless of the advantages of the alternatives.” Id.

Sociologists as well have noted that organizational forms may spread because new organizations imitate forms already in use. As particular forms of organization spread, other institutions adjust to deal with the known institutional pattern. The organizational form spreads because it is the most common, not because it is the most efficient. The more embedded it becomes, the greater the sunken costs of commitments to the first standard and the greater the cost of innovations (including those that might have been far better if adopted first).

Paul DiMaggio and Walter Powell contend that instead of organizational forms spreading for their efficiency, the “bureaucratization and other forms of organizational change occur as the result of processes that make organizations more similar without necessarily making them more efficient.” Paul DiMaggio & Walter Powell, The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields, in THE NEW INSTITUTIONALISM IN ORGANIZATIONAL ANALYSIS 64 (Walter Powell & Paul DiMaggio eds., 1991).

Dimaggio and Powell identify at least four reasons for the increasing homogeneity of institutional forms, what is called their “isomorphism.” Only the first is a competitive mechanism: once an organization becomes a recognized field, “key suppliers, resource and product consumers, regulatory agencies, and other organizations” adopt to the particular form. Id. at 64-65. The other three reasons are “institutional isomorphism,” rather than competitive. Coercive isomorphism results from formal and informal governmental directives. Id. at 67-68. “Mimetic” isomorphism is the tendency of organizations to imitate successful organizations, particularly in times of uncertainty. “Uncertainty is also a powerful force that encourages imitation. When organizational technologies are poorly understood
The substance of the COPAS provisions is even more important than its standardization. In most areas, COPAS puts oil and gas investments on an actual-cost basis. The operator is not supposed to be out to make a profit simply by running the joint account. As discussed in the next section, COPAS endorses the principle that the operator shall neither gain nor lose at the expense of its investors, the non-operators. This principle does not apply to every accounting detail, but COPAS generally has pushed the industry in the direction of this fair, actual-cost standard. COPAS unquestionably has made oil and gas investing far safer for investors.

In spite of its widespread and helpful influence on the industry, however, COPAS has left major areas of oil and gas accounting uncovered. In other areas, it has not required the actual-cost treatment that generally defines the operator/non-operator relationship. Instead, COPAS' bias tilts toward the operator. Because of the recent issuance of the 1995 form, it is timely to address the problems with COPAS accounting standards. The unfortunate treatment of certain issues in this new form underlines the distance COPAS has yet to travel if it is ever to provide full protection for non-operators.

This Article is based on a larger work that discusses general investment standards, not just accounting standards, for oil and gas investments. The Article only sketches an outline for reform; it cannot describe in detail the examples used in that larger work to illustrate the need for reform. The Article's purpose is to describe the hypothetical COPAS contract that the industry would enact if its primary purpose were to give operators and non-operators the same incentives for their shared project. As an exercise in counterfactual logic, the Article's goal is to encourage a broader debate on the substance of the COPAS contract.

The last sections of the Article address broader issues surrounding the industry contract. The final recommendation is that COPAS issue a modified form for two groups of investors who currently receive no standard accounting protection: (1) the drilling fund and partnership investors and (2) the royalty owners. Investors in drilling funds and large partnerships generally receive no accounting information on a well-by-well basis. They never review Authority for Expenditures ("AFEs") or well-specific invoices, or participate in such operational decisions as completion and selection of subsequent wells. Nor do investors have a right to conduct audits as detailed as the joint interest audits. For this reason, and because of the greater complexity of large, multi-well programs, fund investors...
tend to be even more vulnerable to self-dealing and other forms of accounting problems than are equity investors in traditional joint account programs. The industry has left these investors relatively defenseless by not extending COPAS protection to their investment structures.

Royalty owners are a second group of non-operators who suffer from a lack of standardized accounting protection. While royalty owners are not billed for the costs of drilling and completion, they nonetheless may "bear" costs in a variety of ways. If a well is not completed because overcharges make it appear uneconomic, a royalty owner may never receive any revenue from a well that could have been profitable with a better operator. If a royalty owner's interest increases upon payout or at some other cost-dependent point in the economic life of the well, inflated costs that delay payout reduce the lifetime returns to that royalty owner. Because most royalty owners pay a share of production costs, improper accounting practices that occur during production injure their interests as well.

The concluding section discusses the failures of the 1995 COPAS form. At critical points, including the opportunity to insert a statement of purpose and equal treatment on interest, COPAS chose to protect operators at the expense of non-operators. COPAS must do better if its form is to deserve use as the industry standard.

II. TWELVE STEPS TO INDUSTRY ACCOUNTING HEALTH

This Article urges the industry to take twelve steps forward:

A. Insert a statement of purpose that acknowledges the neither-gain-nor-lose principle of joint account investments;
B. Prohibit discounts, delay payments, and other operator self-dealing and police the measures by making operators disclose all anticipated separate profits;
C. Make operators disclose affiliate use before the investment starts;
D. Require separate escrow accounts;
E. Integrate COPAS into the JOA;
F. Require an Authority for Expenditure on every well, and an agreement on the effect of overruns;
G. Bring acreage costs into COPAS;
H. Display the net revenue interest;
I. Make COPAS govern revenue practices;
J. Make operators pay interest on overcharges;
K. Remove the COPAS limitations-shortening clause; and
L. Customize the COPAS form for drilling funds and partnerships, and for royalty owners.

8. "Payout" is "the recovery from production of costs of drilling and equipping a well." WILLIAMS & MEYERS, supra note 2, at 884.
A. COPAS Should Insert a Statement of Purpose That Acknowledges the Neither-Gain-Nor-Lose Principle of Joint Account Investments

Most contracts contain a basic statement of purpose announcing the reason for the contractual relationship. Such a statement fulfills several functions: (1) it guides the courts (and the parties) whenever there is a gap in the contract; (2) it helps interpret ambiguous provisions; and (3) it provides an overall direction for the investment. In this last sense, a statement of purpose articulates the underlying values without which a system of contract is not possible. A statement of purpose fosters the overall understanding needed to facilitate the countless unspecified acts that must occur to effectuate the contract's goals over its performance lifetime.¹⁹

¹⁹. It is a commonplace of sociological theory that contracts cannot be understood from their terms alone, without the group context within which performance occurs. Ma-
caulay, supra note 6. Macaulay discusses the extent to which contract practices depart from the outline of the written agreement. Thus, one attack upon the process of writing a standard industry contract would be, simply, that the most important dynamics of oilfield investing relationships lie outside the contract.

This kind of argument fits the approach of relational contract theorists. Advocates of a new principle for relational contracts assert that many contracts, particularly long-term contracts, cannot specify all of the conditions needed for their performance. Thus, the courts should be more aggressive in implying terms not in the contracts in order to achieve the purpose of the parties. See Ian Macneil, The New Social Contract (1980); Ian Macneil, Contracts: Adjustment of Long-Term Economic Relations under Classical, Neo-

One of the assumptions of the Article is that the repetitive, shared features of oil and gas investing are sufficiently well-understood so that the most important areas for contract improvement do not lie with informal practices, or practices outside existing COPAS forms and related materials. Most of the recommendations in this Article focus on changing the substance of the existing form or bringing matters dealt with by bulletin or interpretation into the form itself. The idea of a meaningful standard industry contract is predicated upon the assumption that the parties to this kind of repetitive relationship can predict the major sources of strain in their relationship and provide very specific solutions to these strains. The industry's experience with the JOA and COPAS and the specificity of the recommenda-
tions in this Article suggest that the major problem areas in the industry are not unfore-
seeable contingencies. They are well-known areas where the operator's and non-operators' interests conflict.

In this context, the idea behind the general statement of purpose discussed in this section is that while the contract cannot list every specific behavioral pattern, it can adopt general language likely to encompass a wide variety of specific situations.

In passing, it is worth pointing out that just because a contract relationship is long term, it does not mean that the parties cannot provide for it in advance. Take-or-pay contracts, for instance, were very long-term arrangements that nonetheless provided specific guidance to the parties. The courts generally did not have any trouble enforcing the terms of those contracts as a matter of law. See, e.g., Universal Resources Corp. v. Panhandle E. Pipe Line Co., 813 F.2d 77 (5th Cir. 1987); Hanover Petroleum Corp. v. Tenneco, Inc., 521 So. 2d 1234 (La. Ct. App. 1988); Golsen v. ONG W., Inc., 756 P.2d 1209 (Okla. 1988); and Hartman v. El Paso Natural Gas Co., 763 P.2d 1144 (N.M. 1988).

It is true that contracts never describe all possible sources of dispute. Indeed, one sign of the health of a contractual relationship may well be how rarely the parties refer to the contract to settle their disputes. It may also be true that, on average, the number of unde-
fined situations increases with the term of the contract (because the chance for unforeseen outside influences to change increases with time). This Article, however, deals with the foreseeable problems in the operator-non-operator relationship.
There should be little dispute over the basic purpose of COPAS. As the late John Jolly, COPAS' former executive director, wrote: "It has always been the intent of the Operating Agreement that the Operator should not make a profit or conversely suffer a loss just by the fact that he is the Operator of the joint operations."10 The foreword to the explanatory bulletin about the first COPAS form, the 1962 form, stated that the "basic purpose" of the form was "that all costs, subject to special provisions, shall be shared in the proportion to the interest of each respective party."11

Under COPAS, an operator can only bill the joint account for charges related to the joint operations, which in turn means only those operations (and presumably expenses) that are “necessary and proper.”12 “Direct charges” for ecological and environmental expenses, leases and royalties, labor, employee benefits, contract services, damages, legal expenses, insurance, reclamation, and communications are to be billed at cost or at a pass-through of the amount the operator paid a third party.13 The touchstone is actual cost. Material bought for the joint account is to be billed "at the price paid" after all discounts are deducted.14 If the price the operator pays exceeds published prices, the operator can bill this higher actual cost but, in that instance, only after giving written notice of the premium charge.15 Even overhead, though calculable from certain for-

10. JOLLY & BUCK, supra note 1, at 108. John Jolly and Jim Buck also state:
   It has also been stressed many times that an operator should neither gain nor lose just because he is the operator. . . .
   It is the intent of all joint operating arrangements that the operator of jointly owned properties be entitled to recover his actual cost as closely as possible in order to properly function as operator. This fact should be discussed at the time the operating agreement is negotiated.
   If the operator has an unusual organizational structure that is different from an ordinary oil and gas company, and it is his intention to make charges for items not normally covered in the printed operating agreement and exhibits, all differences must be discussed in detail.
   Id. at 203; see also Kennedy, supra note 1, at 159 ("It is a well established principle in our industry that an operator is not supposed to profit from the operation, at the expense of his co-venturers.").

   The industry has not had a similar problem when adopting a statement of purpose for its international form. The Association of International Petroleum Negotiators' (“AIPN”) form, the International Accounting Procedure, begins with the following statement of purpose: "The purpose of this Accounting Procedure is to establish equitable methods for determining charges and credits applicable to operations under the Agreement which reflect costs of Joint Operations to the end that no Party shall gain or lose in relation to other Parties." AIPN, 1992 INTERNATIONAL ACCOUNTING PROCEDURE art. 1.1.

12. 1984 COPAS art. I.1 (“Definitions”). Unfortunately, not only did COPAS refuse to insert a statement of purpose in the 1995 form, it also dropped its “necessary and proper” language. In a move that is likely to give operators more flexibility, "Joint Operations" now will be replaced by “activities required to handle specific operating conditions and problems” for working on the joint property. 1995 COPAS art. 1.1 (“Definitions”).

13. 1984 COPAS art. II. These items moved to article III of the 1995 COPAS.

14. 1984 COPAS art. IV.1. This is article VI.1 of the 1995 COPAS.

15. This provision is article IV.4.A. of the 1995 COPAS. The operator is limited to its “actual cost incurred.” Id. The non-operators not only have a right to notice, but also an opportunity to provide material in-kind.
COPAS interpretations confirm an actual-cost intent. Interpretation No. 10, discussing the 1974 form, limits premium pricing to operator cost.17 Interpretation No. 12, on employee benefits, recommends billing the operator's cost, albeit with COPAS' published price as a ceiling.18 Interpretation No. 16, on affiliates, condemns using affiliates to make extra profits and requires billing for services and equipment at cost.19 Interpret-

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16. John Jolly calls it a “general misconception” that COPAS recommends fixed rates. JOLLY & BUCK, supra note 1, at 119. What COPAS recommends is that “overhead rates should generally be based on the operator's cost to provide overhead services to the joint property.” Id. Robert Bledsoe describes the standard and the behavior it is supposed to contain:

Many operators now enjoy overhead rates that are substantially higher than those under which operations began at the inception of the operating agreement. Pursuant to the accounting procedures, such rates rose significantly during the boom period of the industry and have not dropped in a manner consistent with actual overhead costs to the operator. The overhead rates may be excessive when compared to the actual overhead being paid by the operator.

Bledsoe, supra note 1, at 8-16. Bledsoe argues that “[t]he purpose of overhead rates is to compensate the operator for those legitimate out-of-pocket expenses that are not directly attributable to the property.” Id.; see also Cunningham, supra note 1, at 402-09 (discussing how both fixed and percentage overhead should be based on cost; in setting fixed rates the operator “is proclaiming these numbers to represent his average monthly cost per well for administration and supervision for that district”) and for percentage billing the “operator must determine his cost” to calculate the amount.

The bulletin to the 1984 COPAS described the overhead charge as “a provision whereby those costs incurred above the lease operating level . . . are combined into a single overhead allowance for a given type of operation.” COUNCIL OF PETROLEUM ACCOUNTANTS SOCIETIES, ACCOUNTING PROCEDURE JOINT OPERATIONS 1984, Bulletin No. 22, at 20 (Oct. 1985) (emphasis added). The Bulletin noted, though, that parties often agree to “an allowance for Operator in lieu of actual overhead cost.” Id. at 23. In overhead, as in other joint-account areas, non-operators have an interest that operators not bill above or below their costs. An operator losing money is not likely to be very careful in its performance. Each deviation from cost produces its own risk:

[D]uring the marginal and terminal stages of operation, the overhead rates may have an important economic effect to each co-owner. A low rate may place the operator in a loss position and hasten the operator's desire for plugging and abandoning of the operation. If the overhead rate is high because of the continual effect of the escalating provisions of the accounting procedure, the overhead rate may result in uneconomical operation for the nonoperating interests.

Cook, supra note 1, at 212-13.

17. COUNCIL OF PETROLEUM ACCOUNTANTS SOCIETIES, PREMIUM PRICED MATERIAL, Bulletin No. 10 (May 5, 1981). If material is unavailable “because of national emergencies, strikes or other unusual causes over which the Operator has no control,” the operator can charge its “actual cost incurred in providing such material,” after notice and non-operators' having had a chance to furnish their own material. Id.

18. COUNCIL OF PETROLEUM ACCOUNTANTS SOCIETIES, EMPLOYEE BENEFITS LIMITATION, Interpretation No. 12 (Oct. 29, 1982). This 1982 interpretation noted that “most accounting procedures now provide or are modified to provide that the Operator shall charge the Joint Account for employee benefits an amount equivalent to the Operator's cost not to exceed a given percent or the percent most recently recommended by COPAS.” Id. The interpretation recommends that parties bill benefits at actual cost, “not to exceed the percent most recently recommended by COPAS.” Id.

19. COUNCIL OF PETROLEUM ACCOUNTANTS SOCIETIES, DEFINITIONS—OPERATOR AND RELATED FACILITIES, Interpretation No. 16 (Oct. 22, 1986). Interpretation No. 16 addresses the problem that “some Operators have organized their companies to take ad-
Interpretation No. 23, which explains certain equipment pricing provisions that reference manufacturers' published prices, emphasizes that the principle behind these pricing formulas remains the neither-gain-nor-lose principle: "A basic concept of Joint Operations is that the Operator should neither gain nor lose economically from being the Operator of a joint property."

The 1984 COPAS even required the operator to identify exceptions to these principles—all "unusual charges and credits"—separately. COPAS inexplicably dropped this provision from the 1995 form.

Other actual-cost standards appear in the JOA. The 1989 JOA requires that the parties divide all costs based on their respective shares. The operator has to allocate the "entire cost" of reworking, sidetracking, deepening, recompleting, or plugging back wells on an actual-cost basis to the consenting parties. More generally, the JOA dictates that "each party shall be liable only for its proportionate share of the costs of developing and operating the Contract Area."

Operators can prebill the next month's expenses, but only so that each party "shall bear and pay its share of actual expenses incurred, and no more." These are all actual-cost principles.

Actual-cost billing is a very important protection for investors. It represents an effort to guarantee that the operator has the same incentive as the investor. If the operator does not discover oil or gas reserves and produce them in paying quantities, neither the operator nor its investors gain. The operator still may recoup its cost, but it will not make any profit. This equality of interest is imperfect. An operator with high fixed

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20. COPAS “does not condone the use of separate entities to circumvent provisions of the Accounting Procedure,” including using these entities to add a profit while flowing through third party costs. Id. at 1.

COPAS' solution is to make operators whose service companies primarily work on their own wells bill at the operator's cost, including only passing through charges paid to third parties. Id. The bulletin on the 1984 COPAS confirms that “[t]he current consensus is that an Operator should not charge the Joint Account a profit for the use of his equipment.” COUNCIL OF PETROLEUM ACCOUNTANTS SOCIETIES, supra note 16, at 16. The operator is entitled to interest, but to pay for the cost of money, not as a profit. Id.

21. COUNCIL OF PETROLEUM ACCOUNTANTS SOCIETIES, Discounts, Interpretation No. 19 (Sept. 14, 1988) (discount, cash, and trade discounts “should be credited” to the joint account). The only place where “discounts” are mentioned in COPAS is in the section on direct material purchases, which requires billing “at the price paid by [the] Operator after deduction of all discounts received.” 1995 COPAS art. VI.1; 1984 COPAS art. IV.1.

22. COUNCIL OF PETROLEUM ACCOUNTANTS SOCIETIES, Material Transfer Valuation, Interpretation No. 23, at 1 (May 1, 1992).

23. All the 1995 form says is that charges and credits shall now be “summarized by appropriate categories of investment and expense.” 1995 COPAS art. I.2. Controllable material can be summarized by “major Material classifications,” while intangible drilling costs and audit exceptions “shall be separately and clearly identified.” Id.

24. Article VI.A.2.b is especially noteworthy.

25. Id. art. VI.A.

26. Id. art. VII.C.
costs may be using new investors to defray its sunk costs so that even actual-cost billing brings a gain not enjoyed by the investors. But actual-cost billing still should produce a rough equality of interests that points the operator and non-operators' interests in the same direction in most joint investments.

The challenges facing a principal that needs to motivate its agents efficiently, a problem investors face with operators, have occupied a lot of academic attention in recent years. Finding the proper motivational formula is the preoccupation of the principal/agent literature in economics and of a portion of the larger transactions-cost literature. The specific device employed in the standard oil and gas contract to structure the operator's incentive is actual-cost billing. That is why actual-cost provisions are threaded throughout COPAS and the JOA. They force the operator to rely on the joint search for reserves in order to realize a profit. Both the operators and the non-operators depend on the success of their common project.

In this way, the operator should have the same incentive as the investors: a need to find the most production at the lowest cost. That is, maximize reserves and joint profits while minimizing costs. The significance of the operators' maintaining the same economic incentive as the investors is reflected in the operator-removal clause of the JOA. The JOA deems the operator to have resigned automatically if it "no longer owns an interest hereunder in the Contract Area." COPAS does not trust operators who are not at risk.

Efficiency is only one reason why COPAS should give the neither-gain-nor-lose principle more prominence. Another reason is fairness. Equality of risk is the natural expectation of non-operators in most oil and gas programs. Operators know that the shared incentive is a powerful selling point and ordinarily claim such a community of interest when selling prospects. The promise of an identity of interests is one of the most common sales promises in the oil and gas business. Often, it is only if a

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29. Operators and promoters understand exactly how important the promise of shared risk is to investors, as is the harmony of interest that it represents. The promoter in SEC v. Joiner Corp., one of the leading cases in oil and gas and securities law, urged investors to "remember [that], if you do not make money on your investment[,] it will be impossible for us to make money." SEC v. C.M. Joiner Leasing Corp, 320 U.S. 344, 346 n.3 (1943). The
operator in Nor-Tex, who stressed that he had to hock his wife's furs to secure capital for the investment, was trading on the same message of the shared need to uncover commercial reserves as the investor's protection on the quality of his work. Nor-Tex Agencies, Inc. v. Jones, 482 F.2d 1093, 1095 (5th Cir. 1973).

Marvin Davis, the Denver oilman, understood the significance of shared risk when he promised his investor A.E. Investments, Inc. ("AEI"), a subsidiary of the Aetna Insurance companies, that he was putting his money into their programs. AEI's Memorandum in Opposition to Defendant's Motion for Summary Judgment, Deposition Testimony of Roy Hood, AEI President, at 74, A.E. Inv., Inc. v. Davis Oil Co. (D.C. Colo. July 9, 1990) (No. 85-M-1821). [This and other Davis Oil witness citations are to deposition excerpts filed with the court as part of AEI's Memorandum in Opposition to Defendant's Motion for Summary Judgment, A.E. Inv., Inc. v. Davis Oil Co. (D.C. Colo. July 9, 1990) (No. 85-M-1821). Unless otherwise indicated, exhibits will be cited by their summary judgment exhibit number; deposition and exhibit citations are also from the summary judgment record.] A memorandum from AEI's staff to its Board, seeking approval for the initial investment, stated on the first page that of the $800 million budget in Davis Oil's 1981 programs, "Davis will contribute approximately $150 million of this amount from its own funds." Defendants' Exhibit 24, A.E. Inv. (No. 85-M-1821). Aetna's chief financial officer Donald Conrad, who supported the investment, "understood that we were going to be investing with Mr. Davis' participation alongside us." AEI's Memorandum in Opposition to Defendant's Motion for Summary Judgment, Deposition of Donald Conrad at 66, A.E. Inv. (No. 85-M-1821). Accordingly, Aetna accepted prospects offered by Davis Oil, and given the sharing of risks, stated "it would be very unusual for us to somehow decide not to put up money." AEI's Memorandum in Opposition to Defendant's Motion for Summary Judgment, Deposition of Scott Katzmann at 134-35, A.E. Inv. (No. 85-M-1821).

Prudential-Bache and Graham Energy similarly promised that they would be putting their own money on the line with their investor's money in their mid-1980s oil and gas partnerships. The two general partners were very careful to stress this form of insurance. As one of three reasons why their programs were low risk, they gave brokers the talking point that "Prudential Insurance is the largest investor in their own program—they are investing 10% or potentially $20,000,000 [in one program] of their own money in their own program—wouldn't you agree Pru is putting their money where their mouth is?" GRAHAM SECURITIES CORP., HOW TO PROSPECT AND SELL, at 2 (n.d.) (emphasis added) (on file with the SMU Law Review). After also noting that the investor had to receive its initial investment back before the general partner "shares in the revenues," the broker was to ask, "Wouldn't you agree that's a commitment from Prudential?" Id. (emphasis added).

In the Home-Stake Investments that ran through the 1960s, the investors supposedly were to recoup all costs. Only then was Home-Stake to back into an interest. Each "Black Book" circulated to investors contained language like the following from the 1963 program materials:

The participants receive 100% of all oil runs attributable to all oil and gas leases until all of their gross costs have been repaid to them out of oil produced and sold. Thereafter, Home-Stake receives 25% of the runs and pays its share of all costs from that point forward. Thus Home-Stake can make a profit out of the oil produced from the properties in the program only through the medium of oil produced at a profit for its investors. This is a basic and uniform principle of our operations from which we never depart. This is the reason for our statement that our own success mirrors the success achieved for Home-Stake investors.

Home-Stake Production Company, 1963 Waterflood Program "General," at 2-3, Exhibit RD 9, In re Home-Stake Production Secs. Litig., No. MDL-153-R (N.D. Okla.) (emphasis added). This language was in a section signed by company President Robert Trippet. Cf. Calpetco 1981 v. Marshall Exploration, Inc., 989 F.2d 1408, 1418 (5th Cir. 1993) (trial court finding no evidence to support claim that operator "represented that it would not make a profit on certain aspects of the drilling venture"). Fifty years after Joiner, operators still were making the same promise, almost word for word. Compare Joiner, 320 U.S. at 346 n.3 ("Remember, if you do not make money on your investment it will be impossible for us to make money.") with George v. Blue Diamond Petroleum, Inc., 718 F. Supp. 539, 550 (W.D. La. 1989) (operator falsely representing by saying "Also, keep in mind that if you don't make any money in this project, neither do we.").
project has little or no production that investors discover that their operator has a separate incentive. But this is only if the investors are persistent and lucky enough to uncover the full scope of the operator’s profit.

COPAS is not sufficiently clear about its actual-cost basis. It does not recite the neither-gain-nor-lose principle in the accounting form, the only COPAS document that becomes part of the parties’ contract. Additionally, some of the COPAS exhibit’s terms could be clearer. For instance, while the joint account constitutes the charges and credits “to be shared,” most accounting disputes are precisely over what is to be shared. Subsidiary bulletins forbid operators from keeping discounts for themselves and from using affiliates or inventory pricing for personal gain at the non-operators’ expense. But these authorities are not part of the investors’ contract. Moreover, COPAS does not address practices like delay payments and buybacks, even in interpretive documents. Its formulas for equipment pricing also leave room for price gouging.³¹

The Accounting Procedure Rewrite Committee (“APRC”), the COPAS committee entrusted with producing the 1995 COPAS form, rejected proposals to add a COPAS statement of purpose. Some parties had proposed to insert a “statement of intent to maintain equity among the parties.”³² “Equity” presumably would require equality of gains and losses. While the language was flawed because it should have expressed the neither-gain-nor-lose principle more clearly, it was a start.

Clearer language would be as follows:

The purpose of the joint operations, and of the operator’s administration of the joint account, is the common benefit of all parties with interests in the well. The profits from the venture are to come from the production of oil and gas. The operator is neither to gain nor lose by the conduct of drilling itself. Any profit or other benefit accruing solely or in unequal shares to the operator must be specifically noted and initialed separately by each investor.

Unfortunately, COPAS did not adopt any protection. The APRC defended its inaction with the rationalization that with “so many fixed and commercial rates provided” in COPAS, this statement of purpose “would provide for challenging provisions of the agreement itself even after it has been executed.”³³

A fear of conflict among terms is the wrong reason to deprive non-operators of a clear, fair, and incentive-equalizing statement of purpose. To the extent that a general statement that the operator should neither gain nor lose by operations might conflict with specific clauses like the COPAS overhead charge or equipment pricing formulas, these specific provisions would override a general statement of purpose. That specific

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30. 1995 COPAS art. 1.1; 1984 COPAS art. 1.1 (defining “Joint Account”).
31. See infra note 39.
33. Id.
terms override general terms is a basic canon of contract interpretation. Moreover, were the APRC really nervous that such favored clauses might run afoul of the neither-gain-nor-lose principle, it could have singled out those provisions where COPAS has chosen to let operators gain at their investors' expense by simply stating that the enumerated clauses override the statement of purpose.

The reason for industry opposition to this kind of statement of purpose is that many operators want to continue keeping volume discounts, delay payments, profits earned on equipment, and other charges for themselves. They want to gain at the expense of the joint account. COPAS does not want to have to identify these clauses because they conflict with most of its standards and are an affront to the neither-gain-nor-lose principle.

COPAS will not provide full investor protection until it replaces its solicitude for operator profits with equal accounting treatment for all investing parties. This protection would benefit the non-industry investors as well as the major oil companies when they are non-operators. The operator should not gain or lose based on the operator's handling of the joint accounting. A non-operator should not lose as a result of the joint accounting. COPAS should say so.

B. COPAS SHOULD PROHIBIT DISCOUNTS, DELAY PAYMENTS AND OTHER OPERATOR SELF-DEALING AND SHOULD POLICE THIS MEASURE BY MAKING OPERATORS DISCLOSE ALL ANTICIPATED SEPARATE PROFITS

A second measure necessary to the implementation of full actual-cost billing is the prohibition of common forms of operator self-dealing. While COPAS prohibits most of these practices directly or indirectly in its explanatory bulletins and interpretations, it is not clear how tightly these subsidiary forms bind operators. Operators with secret practices naturally argue that these subsidiary authorities are not part of the contract. Even a highly respected authority on COPAS—its former executive director—added to the uncertainty by stating that COPAS interpretations are not "legally" binding. Prohibiting certain common forms of self-

34. RESTATEMENT (SECOND) OF CONTRACTS § 203(c) (1981) (stating "specific terms and exact terms are given greater weight than general language"); see also id. § 203(b) (granting priority to express terms); id. § 202(3)(b) (expressing deference to technical words).

35. JOLLY & BUCK, supra note 1, at 73 (noting that each COPAS guide manual states that "[i]t is recommended that the contents of this bulletin be used as a guide to joint interest operations accounting"). "This second sentence of the paragraph conveys the intent that it is the COPAS recommendation that the contents of each of the bulletins be used as a 'guide' only to joint interest operations accounting and that they are not intended as legally binding instruments." Id. "Although a COPAS interpretation cannot be considered to be binding upon an operator, it is published as a recommended standard to be followed by the industry." Id. at 143.

This does not seem to be the better position. COPAS interpretations generally reflect both industry practice and the most reasonable reading of particular COPAS clauses. Thus, the bulletins and interpretations should be admissible evidence on proper practices and, if
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dealing is sufficiently important to warrant stating the prohibitions directly in the text of COPAS.

To accomplish this fuller protection, COPAS should prohibit operators from retaining any form of volume or other discount. This prohibition is contained in COPAS Interpretation No. 19. It should prohibit operators from keeping interest collected under delay payment agreements.

given weight by the factfinder, may have the same practical effect as if they were "binding."

36. See supra note 20.

"Whether appropriate discounts have been passed along is often a highly contentious issue." DERMAN, supra note 1, at 231. The practice of operators secretly keeping discounts has been quite common at certain points in oilpatch history, including the boom of the late 1970s and early 1980s.

Even though any experienced industry auditor will include volume, trade, and other discounts on the list of items to investigate during joint interest audits, and though discounting practices were prevalent from service companies, particularly during boom years, very few disputes over discounts have reached the courts. One reason is that the audit process channels a lot of conflict. Another is that operators who keep discounts do so secretly and rarely are found out.

For one of the cases in which discounting was at issue, see Gilbert v. Nixon, 429 F.2d 348 (10th Cir. 1970). The investor cited the operator's practice of secretly keeping "special" discounts as one basis for its allegations of fraud. Id. at 357-58. The discounts ran from 15% to 25%. Id. at 357. By the time of trial, the operator had refunded the discounts. Id. at 358. The trial court refused to allow this practice to support claims of fraud, arguing that the discounts were not "significantly related to the basis on which the transactions were consummated." Id.

This treatment hardly seems right. Many investors would refuse to spend their money with any operator who collects hidden profits. This is a tip-off that the operator may drill wells that will not make money from reserves and that the parties have different incentives. In addition, if the operator conceals discounts, the concealment is proof of dishonesty.

Industry companies took exception to Davis Oil's discounting practices so often during the Seventies that discounts turned up as one of the "classical audit exceptions" maintained by the company. AEI's Memorandum in Opposition to Defendant's Motion for Summary Judgment, Plaintiff's Exhibit No. 64, A.E. Inv. (No. 85-M-1821).

37. "Deferred payments" were another frequently raised exception in Davis Oil. One of Davis Oil's investors, a subsidiary of the Aetna insurance companies, would calculate that Davis Oil Company earned over nine million dollars from the float on its investment dollars alone. AEI's Memorandum in Opposition to Defendant's Motion for Summary Judgment, Affidavit of Michael A. Zeeb § 5, A.E. Inv. (No. 85-M-1821).

Several aspects of COPAS seem to prohibit the self-benefiting delay-payment practice, but none do so directly. Until 1974, COPAS defined the joint account as charges "accrued," rather than paid. The shift to charges "paid" confirms that operators are not to bill investors until the operator actually has to pay the vendor's bills. Compare 1968 COPAS art. 1.1 (definition of "joint account") with 1974 COPAS art. 1.1 (I am indebted to Everett Holseth for pointing this change out to me.)

The JOA and COPAS have an advance billing provision that matches billings to cost when paid. In article VII.C, the JOA provides that operators may bill investors for the following month's charges, but that "[p]roper adjustment shall be made monthly between advances and actual expense to the end that each party shall bear and pay its proportionate share of actual expenses incurred, and no more." 1989 JOA, supra note 2, art. VII.C. COPAS contains a parallel advance-billing provision in article I.3.A. The allowance for billing the following month's expenses suggests that operators have no business for charges they will not pay until many months in the future. COPAS' explanatory bulletin tightens the connection between payment and billing even more. It makes advance billing an exceptional practice, stating that advances "may be requested in the case of major capital projects, abnormally high costs of an unusual nature, or for expense work involving extraordinarily large expenditures and not necessarily used on a continuing basis for the routine operations." COUNCIL OF PETROLEUM ACCOUNTANTS SOCIETIES, ACCOUNTING PROCEDURE JOINT OPERATIONS 1984, Bulletin No. 22, at 11 (Oct. 1985).
It should make operators share the benefit of buyback agreements with their supposed partners. Finally, it should prevent operators from billing the joint account for equipment and parts or other items at more than cost unless the parties specifically agree otherwise.

Finally, another portion of the standard accounting procedures that is inconsistent with a license for operators to use prebilling as a way of collecting profits is the fact that COPAS has other ways of protecting operators against late paying investors. An operator can begin charging interest to the non-operator if the latter is more than 15 days late in paying the joint account bill. 1984 COPAS art. I.3.B. Thus, the operator already has protection against late payment and should not need to collect interest.

Operator buybacks were challenged in Dime Box Petroleum v. Louisiana Land & Exploration & Co., 717 F. Supp. 717 (D. Colo. 1989), aff'd, 938 F.2d 1144 (10th Cir. 1991). The court described buybacks as:

"Agreements with third parties under which LLE sold all of its current tubular goods inventory which had been purchased previously at a very high price during a period of high demand. Under these agreements, LLE agreed to later buy back two or three times the amount of tubular goods at the same above-market price, which price it charged to its drilling participants."

717 F. Supp. at 722. The trial court refused to allow recovery after finding that such arrangements were "common knowledge." 717 F. Supp. at 723. The Tenth Circuit affirmed in spite of finding that the "evidence also suggests that LL&E lied to Dime Box concerning its inventory and pipe pricing practices." 938 F.2d at 1146.

This last protection would require a substantial change in existing practices. COPAS created room for operator profiteering on materials when it let operators price materials from their inventory at the current published mill price. 1995 COPAS, art. VI.2; 1984 COPAS art. IV.2. Many operators used this permission to stock up on materials at times of rising prices, let the mill price rise, and then collect an added gain on their inventory.

In fact, the COPAS privilege to use mill-based prices should be conditioned by the operator's duty to avoid accumulating surplus inventory, and to buy only equipment "as may be required for immediate use and is reasonably practical and consistent with efficient and economic operations." 1995 COPAS art. III.3; 1984 COPAS art. II.5. Moreover, to underline the point that operators are not to be in the equipment and material business, these sections also provide that "[t]he accumulation of surplus stocks shall be avoided." 1995 COPAS art. III.3; 1984 COPAS art. II.5.

In practice, many operators use mill prices to unload inventory at much higher prices than they paid. See JOLLY & BUCK, supra note 1, at 141-42. "Probably the most controversial issue in joint interest operations in recent years has been the pricing of material, especially tubular goods when it is moved from an operator's 100-percent owned stock or other properties to the joint property." Id. at 141.

In some instances, operators are using the strict wording of the existing pricing provisions in the COPAS accounting procedures to compute this hypothetical charge resulting in large benefits to them. Again, it is not the intent of the operating agreement that an operator of jointly owned properties should make a profit just by virtue of the fact that he is operator.

Id. at 142. Andrew Derman notes that the mill-pricing section "has been characterized by many oil and gas accountants as simply a license to steal." DERMAN, supra note 1, at 233.

COUNCIL OF PETROLEUM ACCOUNTANTS SOCIETIES, MATERIAL TRANSFER VALUATION, Interpretation No. 23 (May 1, 1992) imposes a partial limitation on operators. It states that transfer pricing should be "generally reflective of market value on the date of transfer." Id. at 1. Thus operators should not be able to charge a lot more than what their material currently is worth. A problem with this bulletin is that it lets operators gain all of the profits from rising prices in times of inflation, and lets them trade away possible discounts for arrangements like buybacks that may benefit the operator alone. The trouble is that the operator is not limited to market value or its actual cost, whichever is lower. Interpretation No. 23 should be read with Interpretation No. 10, which governs premium priced materials. Interpretation No. 10 allows the operator to collect premium prices if it has to pay them, but only in times of "national emergencies, strikes or other unusual causes." COUNCIL OF PETROLEUM ACCOUNTANTS SOCIETIES, PREMIUM PRICED MATERIAL, Interpretation No. 10 (May 5, 1981). Combining this interpretation with Interpretation No. 23's emphasis on
Language that could accomplish these goals would read something like the following:

The operator is to bill and pay the actual cost of operations for the joint account. All discounts, credits, and other benefits, direct and indirect, that the operator receives at any time, including before and after the investment, must be disclosed and shared by the parties in their respective shares. Any other treatment must be expressly disclosed and accepted in writing by the non-operators. The duty of full disclosure covers all agreements affecting costs or credits on any joint account well. It includes agreements made or performable before, during, or after the non-operator signs this agreement.

One can argue that the requirement in the 1984 COPAS that the operator list all "unusual charges and credits" should encompass volume discounts, delay payments, buybacks, and any other secret arrangements. Operators who decide to keep such profits for themselves have never read the clause that way. A common reading limits this language to items that "normally consist of non-recurring items such as taxes, audit adjustments, etc." Moreover, even though the 1984 COPAS already represented a reduction in the billing detail operators needed to provide, the 1995 COPAS lets operators be even more general and has dropped the requirement that "unusual charges and credits" be listed.

That the industry could debate the treatment of self-aggrandizing practices like retaining discounts reflects the insularity of this very wealthy industry. After all, the term "discount" is a euphemism. Discounts are kickbacks, pure and simple. The operator takes its investors' money and uses it to buy products for the joint account from third party vendors. The vendors promise to send some of the money back to the operator. The operator puts the money in its pocket and never tells its investors.

An interesting example of industry resistance to plain talk about discounts occurred in litigation against Denver's Davis Oil Company and its principal, Marvin Davis. About to be put before a jury to explain its discounts and other favorable accounting practices, practices it had tried to hide during joint interest audits and a special accounting review, Davis Oil filed a motion in limine asking the court to prevent the plaintiff from using words like "kickback." The company understood that plain lan-

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40. JOLLY & BUCK, supra note 1, at 78 (discussing 1984 COPAS, art. 1.2). The explanatory bulletin on the 1984 COPAS lists "lease rentals, ad valorem taxes, legal expenses, damages, well contributions, audit adjustments, and audit expenses" as examples of items that should be listed. COUNCIL OF PETROLEUM ACCOUNTANTS SOCIETIES, ACCOUNTING PROCEDURE JOINT OPERATIONS 1984, Bulletin No. 22, at 11 (Oct. 1985); see Cook, supra note 1, at 203. Missing are charges and credits that operators hide from investors and that are "unusual" because they give the operator a separate profit.

41. See 1995 COPAS art. 1.2.

42. In one of the more humorous episodes of oilpatch litigation, Marvin Davis' lawyers asked the court to prevent his investor, Aetna, from using the word "kickback" in describing discounts. Davis Oil's Memorandum in Support of Motion in Limine to Ex-
language would hurt. The clearer the jury's understanding of these accounting practices, the less defensible they become.

The most effective way to police operator conduct in these areas is to give the operator the duty of listing all of its profit sources and getting investors to sign off on each of them. Because no form contract can foresee all possible forms of operator profit-taking, COPAS should require operators to list all profits they expect to collect but not share with the joint account. COPAS should leave a space for the operator to describe each arrangement. Even in turnkey investments, the operator should have to list the profit it expects to earn on the turnkey.43 The require-

clude Use of Inflammatory Terms and References to Pretrial Discovery Matters, A.E. Inv. (No. 85-M-1821).

Not only was Davis Oil afraid of having the jury hear "kickback," the company also wanted the court to impose a ban on "bribes," "lies," "cheat," "steal," "secret profits," "hidden profits," "skimming," and "Ponzi scheme." Id. at 1. Presumably Davis Oil would not have feared these words had they not had some relation to the evidence the jury would hear. This belief is symptomatic of a more widespread industry belief that the practice is sanitized when labeled "discounts," rather than "kickbacks."

Of course, a skunk in the woodpile remains a skunk even if you call it a cat.

The court denied the motion in limine.

43. The need for cost disclosure on turnkeys arises because operators usually make representations about the relation between the turnkey amount and their actual costs. Turnkey contracts offer a great temptation to some operators. Consider, for instance, Nor-
Tex Agencies, Inc. v. Jones, 482 F.2d 1093, 1095-96 (5th Cir. 1973) (operator listed cost of wells at $10,000 for dry holes and $32,000 for completed wells, but knew costs would be "substantially less" than represented); George v. Blue Diamond Petroleum, Inc., 718 F. Supp. 539, 541-42 (W.D. La. 1989) (operator told investors that the turnkey price was based on actual cost, but concealed that $12,000 of $30,000 was secret profit); Donohoe v. Consolidated Operating & Prod. Corp., 982 F.2d 1130, 1133, 1136 (7th Cir. 1992) (operator promised investor that, while it made a "substantial profit" on turnkey, turnkey price was competitive; yet evidence showed that profits were "grossly inflated because the turnkey price of the wells was not competitive, a fact not disclosed to the investors"). Within the interlocking empire of companies run by Denver's John King, "turnkey" acreage sales were used to bilk investors of millions of dollars. In addition to billing above costs, John King at times assigned only part of the properties acquired for the turnkey investors, kept rights to lower depths, and even kept a right to add burdens "whether or not they are specified in the individual turnkey agreements." Revised and Supplemental Statement of Plaintiffs re: Relevancy and Authenticity of Exhibits at 191-92, In re King Resources Co. Secs. Litig., 420 F. Supp. 610 (D.C. Colo. 1976) (No. C-3873) (discussing Exhibits 2368, 2795B).

Another company that manipulated turnkey billing was Longhorn Oil and Gas of Oklahoma City. In theory, Longhorn promised to contribute acreage at its cost and then drill properties for a turnkey price. Investors reasonably expected the turnkey price to depend upon "the area of interest and other factors such as the number of zones to be completed, the cost and availability of equipment, and various risks inherent in drilling a specified well." Plaintiffs' Pretrial Brief, at 78, In re Longhorn Secs. Litig., 573 F. Supp. 278 (W.D. Okla. 1983) (No. CIV-82-1415-E). Longhorn's accountant at Coopers and Lybrand told investors that the company's turnkey profits were "reasonable and comparable to the profits received by others in the industry," and its advisor investment search offered the seal of approval that it "has compared the turnkey contract prices of prior programs with the actual costs incurred, and believes they are equal to or less than prices charged by independent third parties." Id. at 75, 149-50.

The truth was quite different. Longhorn was adding a 33% profit to its turnkey billing. It applied this one-third markup to its expected cost when it set the turnkey price. Id. at 78. Longhorn may have exceeded even this ambitious goal. At one point, the company calculated that it was earning a 36.23% profit on its turnkey arrangements. Id. at 75.
ment should include areas where COPAS lets operators charge average commercial rates, such as overhead and materials taken from inventory.

Operator profit disclosure performs two functions. To the extent that operators intend to make money on their own, and thus enjoy a different incentive than their partners, this information puts non-operators on notice of the skewed incentive. Non-operators will have the information needed to choose another investment if they are risk averse. To the extent that operators who keep special profits still don't disclose them, their failure to comply with such a COPAS requirement will create a very clear and appropriate basis for non-operators to prevail in subsequent litigation.

COPAS would have to determine the form of profit disclosure. Ideally, the operator would list more than the existence of agreements like volume discounts. It should have to provide at least enough information to show how the anticipated separate profits will split the operator's and non-operator's interests. For instance, a 25% discount distorts incentives more than a 5% payment. Likewise, a discount on a major item like drilling mud distorts incentives more than discounts for trucking a single item to the well.

It will be up to the non-operator to decide what weight to apply to each practice. Each special operator inducement may or may not change the non-operator's investment analysis. The profit listing needs to be sufficiently comprehensive to give a rough gauge of how much separate profit will accrue to the operator. In this way, non-operators will have some measure of the operator's separate incentive.

As a contract provision, of course, COPAS does not prohibit operators from negotiating a wide variety of special arrangements. The contract's purpose is to put billing on an actual-cost basis, but only unless otherwise agreed. Like any contract, COPAS is open to negotiation. Thus, the reforms urged here would not prevent operators from keeping volume discounts, delay payments, or any other benefit if their investors agree.

It is little secret, however, that most of these practices have found a home in this industry precisely because operators keep them secret. Operators do not want to negotiate these terms because the practices would be unacceptable to most investors. Some operators may have such ex-
traordinary skill that non-operators will submit to the most burdensome terms for a chance to share even a fraction of the operator's good fortune. But if handling the joint account is to make an operator rich even in programs that fail the investors (because they never find reserves in paying quantities), COPAS should make certain that the operator reveals its perverse incentive structure before investors commit to funding the project.

C. COPAS SHOULD MAKE OPERATORS DISCLOSE AFFILIATE USE BEFORE THE INVESTMENT STARTS

One of the structural characteristics of the oil and gas industry is that operators often use affiliates. Operators have a number of reasons for using affiliates. The operator may believe that it can better monitor quality. An operator may find it easier to time the delivery of services by using related companies. Or the operator may believe it needs workers with specialized skills in areas with unusual geological and engineering features and that it can best furnish these services if it handpicks and trains the workers itself.

Unfortunately, another reason for providing services through affiliates is to levy secret fees on the joint account. Whether selling production or

In entering this investment, you should know that I will make money in a number of ways that you will not share. When I use your money to buy equipment and services, I will pocket 10% or 15% of the money as a discount, even if this means that I can't use the lowest cost vendors. I may hold your money for a year or more, in order to earn interest on the float. Some of our equipment will come from my inventory, and will be marked up to much more than it cost me. The acreage charge has no relation to my cost. And though I will give you junk credit for a lot of the old equipment on our common properties, I will earn a lot more when I trade this equipment back to vendors under buyback agreements. Moreover, when you do not take your production and I exercise my option under the JOA to dispose of it, I will pay you a lower price than I earn when I resell the production through my marketing affiliate.

As a result of these arrangements, I intend to use your money to pay for my share of this investment. I may make money on wells that are dry holes. My employees will be happy to help me because I gave some of them overriding royalties out of your acreage.

While this is a pastiche of the worst practices, most investors would want to know if any of these practices will infect their program.

45. Studying how companies form the "make or buy" decision—whether to use their own resources or venture into the marketplace—has occupied much of the recent work of Oliver Williamson. See, e.g., OLIVER WILLIAMSON, THE ECONOMIC INSTITUTIONS OF CAPITALISM (1985). Williamson assumes that companies will only furnish services themselves if it is more efficient to do so. Presumably the same analysis should apply to the affiliate decision.

It is part of Williamson's theory that businesses are "opportunistic." If so, some firms will adopt practices not for their productive efficiency, but because they enable the companies to cheat their customers. For this reason, the fact that many oil and gas companies use affiliate's is not sufficient to prove that affiliates invariably offer an efficient way of doing business. The corporate form may only be a more efficient way of fleece investors. Moreover, some operators use affiliates more than others, and companies that use affiliates do not use them in all circumstances; both facts suggest a complexity that efficiency alone may not explain.
providing equipment and services, an affiliate may offer an excuse for adding more to the price, or for collecting an extra share of the revenue that belongs to the investors. In these instances, the operator profits at the expense of its partners.46

46. See, e.g., JOLLY & BUCK, supra note 1, at 107. "In recent years however, some operators have intentionally structured their companies to take advantage of a clear definition of the term 'operator' when it relates to the use of operator-owned equipment and facilities for charges to the joint operations." Id.

For some litigation addressing affiliate pricing issues, see Texas Oil & Gas Corp. v. Hagen, 683 S.W.2d 24 (Tex. App.—Texarkana 1984), aff'd in part and rev'd in part, 31 S. Ct. J. 140 (Tex. 1987) (affirming opinion requiring Texas Oil & Gas Corporation ("TXO") to disgorge profits to royalty owners for reselling production at higher price through affiliated seller, but reversing exemplary damages on what Supreme Court viewed as merely a contract claim), opinion vacated after settlement, 760 S.W.2d 960 (Tex. 1988); Atlantic Richfield Co. v. Long Trusts, 860 S.W.2d 439, 444-45 (Tex. App.—Texarkana 1993, writ denied) (stating that operator's duty to obtain "best price obtainable" if it sold non-operator gas did not include benefit of operator's long-term contracts, but preventing ARCO from paying between $1.40 and $1.60 per MMBTU for gas its affiliate resold at $2.90); 893 S.W.2d 686 (Tex. App.—Texarkana 1995, no writ) (affirming award of attorneys' fees); contra, Parker v. TXO Prod. Corp., 716 S.W.2d 644, 647-48 (Tex. App.—Corpus Christi 1986, no writ) (affirming trial court that reached opposite conclusion from Hagen, finding no evidence that TXO treated its pipeline affiliate Delhi as a shell, and affirming trial court finding that TXO acted in good faith and reasonably prudent manner in reselling gas to Delhi); Garfield v. True Oil Co., 667 F.2d 942, 945-46 (10th Cir. 1982) (affirming trial court decision that payment for production at posted price did not breach operator's duty to net profits owners, even though operator's affiliate then sold production at a higher price); cf. Bullock v. Mid-American Oil & Gas Inc., 680 S.W.2d 612, 615-17 (Tex. App.—Austin 1984, writ ref'd n.r.e.) (stating producers' wellhead "sale" to affiliate, without cash changing hands, at $0.65, was first sale for purposes of Texas occupational tax, even though affiliate then resold production for $.95 per mcf).

Affiliate issues are appearing more often in cases involving natural gas pipelines. This is because the deregulation of ancillary services has led to a profusion of pipeline affiliates taking separate cuts for each service. For one of the earliest of these cases, see Complaint for Breach of Fiduciary Duty and other Tortious Conduct, Bank One, Tex. N.A. v. Meridian Oil, Inc. (1st Dist. N.M. Aug. 31, 1994) (No. SF94-1982(c)). The Bank One Trust's allegations include claims that Meridian deducts higher costs for services such as transportation than it actually pays its former affiliate El Paso Natural Gas Company; that it pays a lower price on royalties than it gets when it actually sells the production through an affiliated corporation; and that Meridian entered sweetheart take-or-pay settlements with former affiliate El Paso and with Northwest Pipeline Company. Id. §§ 33-34, 41-49.

Meridian also has been sued in a class action based on largely similar allegations. Plaintiffs' Second Amended Original Petition, Altheide v. Meridian Oil, Inc. (113th Dist. Tex. Sept. 23, 1994) (No. 92-026182).


Another type of resale issue that can involve affiliates has recently arisen over the longstanding practice of oil companies to pay for oil on a posted price basis. The Texas Land Commissioner, three private trusts, a guardian, and a class recently sued the eight major oil producers in Texas—Amoco, Chevron, Exxon, Marathon, Mobil, Phillips, Shell, and Texaco. The plaintiffs argue that these companies have underpaid royalties due the Permanent University Fund by basing their payments on the industry posted price. Original Petition, Texas Gen. Land Office v. AMOCO Prod. Co. (354th Dist. Tex. July 14, 1995) (No. 95-08680) [hereinafter Land Office Petition]. The plaintiffs also sued on behalf of a class of "those persons to whom the defendants have made royalty or overriding royalty payments, calculated by the defendants on the basis of 'posted prices' for crude oil." Id. § 24. A study performed for state land offices in Texas, Colorado, and New Mexico found that the posted price was 3% to 6% below market prices in the several years before the
There are several corresponding reasons why a non-operator should know when the operator is using an affiliate. First, because affiliates increase the non-operator's risk, non-operators may decide to avoid the investment. Second, use of affiliates provides notice of areas that may be


The plaintiffs allege that each defendant assumed the duty "to pay royalties based upon at least a fair market price for crude oil production." Land Office Petition, *supra*, § 18. Instead they allegedly "have calculated and made payments on the basis of so-called 'posted prices.' They have done so as a matter of continuing business practice. As they know, the level of 'posted prices' has been consistently below the fair market value of crude oil." *Id.* § 19.

Major oil companies have long bought oil at published posted prices. When the posted price lawsuit was first reported in the press, a representative of the Mid-Continent Oil and Gas Association, an industry group, responded that "the posted price typically is higher than the market price." Stuart Eskenazi, *State Claims 8 Companies Underpaid Oil Royalties*, AUSTIN-AMERICAN STATESMAN, July 15, 1995, at A1.

The Land Commissioner's case is only a breach of contract case involving royalty terms, not an antitrust case. See, e.g., Petition, Kershaw v. Amoco Prod. Co. (Seminole County Fla. Sept. 13, 1995) (No. CJ-95-184) (suit against 13 oil companies with class of "those persons to whom the defendants have made royalty or overriding royalty payments" using posted prices; suit for breach of express and implied covenants, UCC violation, and accounting). Other plaintiffs have filed parallel lawsuits, however, using antitrust conspiracy theories. Plaintiffs' First Amended Original Petition, Lee County v. Union Pacific Resources Co. (335th Dist. Tex. Oct. 23, 1995) (No. 10,651) (suit against over 50 companies, with class of royalty and working interest owners whom defendants have paid for Texas oil at posted or discriminatory prices, and with claims under various state statutes including common purchaser and competition statute and demand for audit and accounting); Lee County v. Union Pacific Resources Co. (335th Dist. Tex. Oct. 23, 1995) (No. 10,651) (adding more than 20 more companies).

In a case filed in federal court in Houston, the plaintiffs sued 35 major oil producers for price fixing via their posted prices. The proposed class is as follows:

All owners of Direct Payee Royalty Interests and Working Interests who were paid or credited by virtue of Lease Production Oil produced and first sold to one or more Defendants or Affiliate Traders from a mineral lease at or by reference to posted price at any time since September 30, 1986.


Another example of the significance of affiliates is True Oil Co. v. Sinclair Oil Corp., 771 P.2d 781 (Wyo. 1989). The industry non-operator, Sinclair, made sure that True Oil agreed that its billing would be "at Dave True's cost." *Id.* at 787. The trial court found that the parties agreed to proceed on this basis. *Id.* at 792. The parties entered into an agreement to document this understanding, which made Sinclair liable for 50% of "all costs." *Id.* at 796. The agreement was to control the parties' other written documentation. Dave True nonetheless billed Sinclair affiliate charges that included a markup. Thus he earned a profit through his affiliates, even though he could not have done that directly.

The trial court enforced the agreement and found that the affiliate billings violated its terms. Unfortunately, on appeal the Wyoming Supreme Court went through a series of doctrinal contortions to negate the discussions and agreements. It found the agreement "somewhat vague and indefinite, thus ambiguous." *Id.* at 791. It then stymied Sinclair's purpose by deciding that "Dave True's cost" did not include his affiliate's costs. *Id.* at 792-94. In this way, True was allowed to make a profit by imposing a corporate shell between himself and Sinclair that he could not have made directly.
particularly fruitful to audit.\textsuperscript{47} Third, the non-operator may want to discuss affiliate charges with the operator in detail before deciding whether to invest. Non-operators need this information to make an efficient investment decision.\textsuperscript{48}

The industry has long wrestled with the affiliate problem. It has never banned affiliates, presumably because affiliated companies can benefit the joint account. Today's standard contracts do offer non-operators limited protection. In 1986, COPAS issued an interpretation on "related companies" to clarify its intent that operators using related companies primarily on their own wells bill only their actual costs.\textsuperscript{49} The JOA contains the looser standard that operators using their own tools and equipment cannot charge more than the "rates prevailing" in the area. This limit would make little sense if it does not apply when the operator uses its own tools and equipment through an affiliate as well. The operator is even supposed to get written agreement on the rates for its tools and equipment "before drilling operations are commenced."\textsuperscript{50} The "prevailing rate" standard would let an operator with low costs charge more than its costs as long as it stayed under the prevailing rate ceiling. In 1995, COPAS added an affiliate ceiling clause stating that affiliate charges "shall not exceed average commercial rates" for services or materials.\textsuperscript{51}

\textsuperscript{47} In the international model form, parties are to select among two alternatives: either they can audit affiliates, or the operator "shall endeavor to produce information from Affiliates reasonably necessary to support charges from those Affiliates to the Joint Account." AIPN, 1992 \textit{INTERNATIONAL ACCOUNTING PROCEDURE} art. 1.8.1. Under the second option, if the affiliate will not allow an audit, the affiliate must provide the information through a statutory auditor and, if it won't do that, non-operators can select an "internationally recognized independent firm of public accountants" to audit. \textit{Id.}

\textsuperscript{48} The operator's use of affiliates changes the investment risk even if it does not end up hurting the joint account; it means that investors will face a different type of relationship. \textit{See SEC v. Geotek, 426 F. Supp. 715, 743 (N.D. Cal. 1976)} ("[R]egardless of the immediate or ultimate benefit conferred upon the programs through these transactions, the fact that the transactions were with 'affiliates' and the fact that the transactions resulted in a profit to Jack Burke, personally, were material facts . . . . ").

\textsuperscript{49} \textit{COUNCIL OF PETROLEUM ACCOUNTANTS SOCIETIES, DEFINITIONS—OPERATOR AND RELATED FACILITIES, Interpretation No. 16 (Oct. 22, 1986).} The interpretation defines related companies broadly. It encompasses "any entity in control of or controlled by the Operator; any entity under common control with the Operator; or any entity which has a significant number of common employees, management, officers, directors, or ownership with the Operator." \textit{Id.} at 2.

The interpretation allowed companies that conducted a substantial amount of business with companies other than its related entities—that is, that could show they were competitive in the marketplace—to bill the joint account the same price as the terms it billed its "most favored" customers. \textit{Id.} Unless the affiliate could make this showing, it had to bill only its "actual cost incurred." \textit{Id.}

\textsuperscript{50} The JOA limits operators using their own tools and equipment to "rates prevailing" in the area, with the rates to be agreed to before work begins, and to be controlled by "customary and usual" terms and conditions. 1989 JOA, \textit{supra} note 2, art. V.D.1. This article is captioned \textit{Competitive Rates and Use of Affiliates}.

\textsuperscript{51} 1995 COPAS art. I.6. COPAS now has several sections, addressing topics ranging from equipment taken out of inventory to the operator's using its own tools to off-the-premises facilities, in which average commercial rates are among the pricing options. \textit{See infra} notes 140-55. The practical effect of these sections, in combination with article I.6, is that billing is likely to be at the operator's liberal perception of average commercial rates,
None of these clauses require the operator to tell its investors that it will be using affiliates, or what portion of the joint-account billings will be billed by affiliates, before they commit to the program. Even under the 1984 COPAS, the operator was supposed to give notice of its rates "whenever requested" before using facilities it owned.\textsuperscript{52} But the industry has avoided any requirement that investors learn of risk-altering affiliate use before they invest.

When the AAPL revised the JOA in 1989, the first draft of the new form would have forced operators to give written notice before they used affiliates.\textsuperscript{53} That proposal did not survive. Industry companies complained about the burden of disclosure even though they offered no evidence that disclosure imposed much burden at all.\textsuperscript{54}

The significance of affiliate disclosure will increase if COPAS adopts this Article’s recommendation that COPAS incorporate revenue standards. The use of affiliates to collect an added fee when they sell production on behalf of non-operators has long been a problem.\textsuperscript{55} The room for dispute has increased as natural gas pipelines deregulate their marketing, gathering, and processing companies. With each new deregulated entity even if those rates are well above the operator's costs and so generate a large, undisclosed profit.

\textsuperscript{52} COUNCIL OF PETROLEUM ACCOUNTANTS SOCIETIES, ACCOUNTING PROCEDURE JOINT OPERATIONS 1984, Bulletin No. 22, at 17 (Oct. 1985).

\textsuperscript{53} 1989 JOA First Draft, art. V.D.1 (Nov. 19, 1987). The AAPL would have made the operator "notify Non-Operators in advance of the use of any such affiliates." \textit{Id}.

\textsuperscript{54} Affiliate disclosure did not draw as many objections as some changes proposed for the 1989 JOA, like escrow accounts. Some companies did not bother to comment on this provision, and others even liked it. \textit{See, e.g.,} Letter from Paul Feldman, Landman, Anadarko Petroleum Corporation, to Dr. Larry Rice, AAPL (Feb. 1, 1988) (on file with the \textit{SMU Law Review}). "The proposed new language in Article V.B.3. and V.D.1. through 7. seems to be an excellent addition and should be maintained in our opinion." \textit{Id.} at 3.

Other companies, however, were very critical. \textit{E.g.,} Letter from Thomas Furtwangler, Land Manager, ARCO, to Ms. Harriet H. Person, AAPL (Jan. 27, 1988) (on file with the \textit{SMU Law Review}). ARCO strongly recommends the deletion of the last sentence in the provision. All parties are already protected via the competitive rate concept and through the audit process in the COPAS. The creation of the additional notice obligation is totally unnecessary. It will create additional burdens on all parties, potentially slow operations and may indirectly increase costs. \textit{Id.} at 7.

\textit{Letter from George L. Potter, Jr., Senior Counsel, Hunt Oil Company, to Dr. Larry Rice, AAPL (Jan. 29, 1988) (on file with the \textit{SMU Law Review})}. We suggest that there is no reason why Operator should have the obligation to notify Non-operators in the advance of Operator using an affiliate to perform work or supply materials. The Non-operators have sufficient protection under the existing operating agreement and accounting procedure from abuses by Operator using affiliates. \textit{Id.} at 2.

None of the protections in the existing agreement let non-operators know in advance of their investment that the operator is going to use affiliates, so that they can consider how this altered their risk. Yet that is the protection they need.

Even COPAS supported dropping affiliate-notification protection. Letter from R.O. Berverson, Executive Director, COPAS, to Mr. Dorsey T. Roach, Landman, Mesa Limited Partnership (June 8, 1988) (on file with the \textit{SMU Law Review}). "We concur with deleting the last sentence which requires a disclosure of the use of affiliates." \textit{Id.} at 2.

\textsuperscript{55} \textit{See supra} note 46.
comes another chance to extract profits from non-operators and those who sell their product to the pipeline.56

The ability to use affiliates has the potential to benefit both operators and non-operators. In many instances, however, it benefits solely the operator. Many affiliate transactions are one-way transactions: Investors get no consideration from the operator who prices its related services above competitive rates or who performs the services at below competitive standards. It is a benefit to the operator to be permitted to use affiliates. In return, operators should at least put non-operators on notice that they will be using affiliates before non-operators decide whether or not to invest.

D. COPAS SHOULD REQUIRE SEPARATE ESCROW ACCOUNTS

Every time an investor pays money into the joint account or an operator sells production on behalf of its business partners, the operator receives money that belongs to the other parties who own an interest in the operator's project. The operator is supposed to spend investment funds on behalf of the specified drilling and completion projects. It must disburse revenues to the owners of the production.

This money is received in trust. The operator holds it on behalf of others, not itself. Ordinary trust principles should prohibit it from commingling the funds of separate programs, or worse, commingling those funds with its own funds.57

In spite of the fact that the operator is not to use this money for its own ends, a common industry practice is to commingle funds for all projects in a single bank account. The money is not escrowed, nor is it kept in separate accounts from project-to-project. Operators use money from one program to pay costs on another. Many operators spend this money to pay their own bills. They gamble on being successful enough to replenish this money with other revenues as bills come due.58

56. It is no accident that some of the affiliated-company cases discussed in footnote 46 supra are against interstate pipelines and involve their now deregulated services. Where there is temptation, there will be takers.

57. RESTATEMENT (SECOND) OF TRUSTS § 179 (1959). The comments are quite explicit that the trustee ordinarily must "keep the trust property separate from property held upon other trusts," and is "not to mingle trust funds with his own funds." Id. cmts. a, b.

Some courts have imposed trustee-type duties on project funds to protect them from being mixed with the operator's other funds during bankruptcies. Reserve Oil, Inc. v. Pengo Petroleum, Inc., 711 F.2d 951 (10th Cir. 1983); In re Mahan & Rowsey, Inc., 35 B.R. 898 (Bankr. W.D. Okla. 1983) (discussing issue of operator's serving as trustee in holding venture funds); Bledsoe, supra note 1, at 8-25. This is not sufficient protection, however, for non-operators. It is not at all clear that other courts will follow this precedent. Moreover, the non-operators were fortunate that there were enough funds left for anything to be repaid. In many bankruptcies, the operator won't have funds left, even if the court defines joint account money as trust funds, because the operator has been spending the funds promiscuously.

58. This practice is sufficiently prevalent that COUNCIL OF PETROLEUM ACCOUNTANTS SOCIETIES, GUIDELINE FOR CASH FLOW BUDGETING IN THE PETROLEUM INDUSTRY, Bulletin No. 27 (1989), which lists "Debt Sources and Uses of Cash," should include "spending
This fiscal promiscuity creates several risks for investors. First, if some projects are underfunded, the bankruptcy on those projects may drag perfectly solvent drilling programs down with them. Second, the ability to draw on the same set of funds for a variety of programs facilitates the operation of Ponzi schemes in which operators disguise their lack of success by simply raising more money in new ventures. The new dollars non-operators' funds as a primary source of loans for many operators. Id. at 13-14. If COPAS is not going to forbid this practice, it might as well not hide it. 59. For instance, this happened in the Invoil/Wells-Battelstein Program. Plaintiffs' Settlement Conference Statement for Settlement Conference on March 28, 1986, Exhibit 2, Affidavit of Larry J. Brandt §§ 21-22, In re Invoil Secs. Litig. (W.D. Okla.) (MDL No. 585) (describing operator that depended upon borrowing additional funds to meet existing commitments). To say that good programs were ruined by others may be an exaggeration; but at least it is true that marginal programs were destroyed by the ruinous Invoil programs. 60. Two of the most notorious Ponzi schemes in the industry are the Home-Stake programs, which apparently operated for at least a decade by collecting millions of dollars while drilling only a fraction of the promised wells, and the Prudential drilling partnerships of the mid-1980s. Home-Stake's defalcations are detailed in In re Home-Stake Prod. Co. Secs. Litig., 76 F.R.D. 337, 341 (N.D. Okla. 1975) and Anixter v. Home-Stake Prod. Co., 939 F.2d 1420 (10th Cir. 1991), rev'd after change in applicable limitations, 977 F.2d 1549 (10th Cir.), amended, 947 F.2d 897 (10th Cir. 1991). The trial court denied defendants' motion to dismiss on limitations grounds in 76 F.R.D. at 337. Years later, after lengthy procedural delays, the court awarded damages to the class. The Tenth Circuit reversed on limitations grounds in 939 F.2d 1420 (10th Cir.), amended, 947 F.2d 897 (10th Cir. 1991). The Supreme Court vacated and remanded this order in 596 U.S. 978 (1992). On remand, the Tenth Circuit upheld reinstatement of the securities causes of action. 977 F.2d 1549 (10th Cir. 1992), cert. denied, 113 S. Ct. 1841 (1993). The evidence showed that Home-Stake had to rely upon commingled funds because it was drilling almost no wells, even though it collected millions of dollars each year from investors who assumed the company was exploring for reserves. For instance, of $35,000,000 raised for the 1968 and 1969 programs, only $500,000 went to property development. 76 F.R.D. at 342. The company covered its tracks by erecting sham facilities, painting irrigation pipes as if they were moving oil, drilling shallow and incomplete wells when they had promised target depths of thousands of feet, and even setting up a rig with a "squirtor" so that investors who visited their operations could see a little bit of production. Plaintiffs' Consolidated Opposition to the Motions of Defendants for Judgment Notwithstanding the Verdict or, in the Alternative, For a New Trial, at 15-16, 45-46, In re Home-Stake Prod. Co. Sec. Litig. (N.D. Okla. 1975) (No. 153) [hereinafter Consolidated Opposition]. This decade-long Ponzi scheme could not have survived more than a few years had Home-Stake not been able to use later investment dollars to keep paying off earlier investors. Indeed, as is often the case with Ponzi schemes, one of the problems for Home-Stake was that it paid out too much, given the lack of production. In a bizarre irony, company president Robert Trippet repeatedly reclassified expenses so that Home-Stake would absorb them, rather than bill the investors, in order to preserve the appearance of success. Trippet was able to transmute a $3.2 million loss into $11.2 million in paper gains in this fashion. Appellees' Brief at 9-11, Anixter v. Home-Stake Prod. Co. (10th Cir. 1991) (No. 90-5040). Trippet pursued another solution to the cash flow problem by paying different groups of investors different amounts; he ended up with 24 groups of investors. Consolidated Opposition, supra, at 22-24. Robert Trippet admitted that he put all his investors' funds in one account and felt free to use them for "corporate purposes," although he modified his assertion with "legitimate and lawful" corporate purposes. Record at 1490, In re Home-Stake (No. MDL-153-R). These uses included buying an apartment house and a lime plant. Id. at 1490-91. Escrow accounts are not a panacea that would end this kind of fraud. But had Home-Stake been required to keep each year's program in a separate account, and had audits policed this requirement, it would have run out of money to fleece new investors within a
then are funneled back to pay the earlier investors. The internal circulation of investor dollars temporarily invigorates the unsuccessful programs and thus creates an illusion of success that lasts as long as the operator can find new investors. Third, the mixing of program funds can create such an overall appearance of wealth that it lulls operators into careless spending that might not occur if they had to maintain funds program by program.\textsuperscript{61}

The industry can solve its commingling problem easily and cheaply. COPAS should adopt a provision proposed to the AAPL in 1989 which

\textsuperscript{61} The best example of the false security that a single large account can generate may be from Petro-Lewis. Petro-Lewis was the largest fund during the boom years of the late seventies and early eighties. Resources Programs, Inc., \textit{The RPI Survey: A Report on the Oil and Gas Program Industry,} reprinted in \textit{The Institute for Energy Development, Inc., Obtaining Drilling Capital from Tax-Oriented Investors} 6-8 (Lewis Mosburg, Jr. ed. 1981). At its peak, Petro-Lewis was spending $100 million a year to maintain a national broker network. Joint Affidavit of Plaintiffs' Co-Lead Counsel Authur N. Abbey, Gerald L. Bader, Jr. and Edward Labaton in Support of the Proposed Settlement of the Consolidated Action at 5, \textit{In re Petro-Lewis Secs. Litig.} (D. Colo. 1983) (No. 84-C-326) [hereinafter Settlement Affidavit]. The Petro-Lewis programs did very well as prices rose during the Seventies, but the company could not sustain its economics when the boom ended. Instead of retrenching, however, it tried to keep selling new units. \textit{Id.} at 7-10.
called for operators to establish a separate escrow account for each project.\textsuperscript{62} One of the primary reasons for revising the JOA in 1989 was to give non-operators greater protection against bankrupt operators.\textsuperscript{63} Nonetheless, the AAPL rejected this most elementary form of protection after a rash of criticism from industry companies who claimed escrows would be overly burdensome.\textsuperscript{64}

\begin{footnotesize}
\begin{enumerate}
\item The first draft of the 1989 JOA would have required an escrow account at the election of the operator or a majority of non-operators; made the operator both pay and document its own contribution at the same time that non-operators paid; and defined the operator as a trustee when it handled joint account funds. 1989 JOA, \textit{supra} note 2, arts. VIII.B.3, VIII.B.1, V.D.4 (First Draft Nov. 19, 1987) (on file with the SMU Law Review). Even had the AAPL adopted this provision, it still would have required an election for separate accounts. The protection should be automatic.

Separate accounts would have given the proper answer to the bizarre holding in one case that a requirement that funds initially be deposited into separate accounts "did not expressly provide or reasonably imply that such separate accounts would be maintained after such funds had been disbursed by the programs to the operator and/or manager." SEC v. Geotek, 426 F. Supp. 715, 740 (N.D. Cal. 1976), \textit{aff'd sub nom.} SEC v. Arthur Young & Co., 590 F.2d 785 (9th Cir. 1979). The court stretched far beyond the bounds of plausibility in holding that documents providing for separate "trust accounts," "escrow accounts," or just "accounts" were somehow different than separate "bank accounts" with the former implying just separate bookkeeping, rather than physically separate accounts. This holding ignores the fact that the reason for separating accounts in the first place is to make sure that each group of investors' risks are matched to their own project, rather than to other programs run by the same operator.

\textsuperscript{63} E.g., Letter from Thomas M. Furtwangler, Land Manager, ARCO, to AAPL 1 (Jan. 27, 1988) (on file with the SMU Law Review) ("ARCO feels the challenges created by bankruptcies, marketing arrangements, and concerns over a partner's financial viability strongly warrants modifying the 1982 Agreement."); letter from H. Winston Davis, Kilroy Company, to AAPL 1 (Dec. 16, 1987) (on file with the SMU Law Review) ("Certainly such issues as bankruptcy and creditor-related problems took on new importance between the printing of the 1982 form and the appointment of the subcommittee responsible for the 1988 provisions."); letter from Thomas W. Lynch, Vice-President and Chief Counsel, Sun Oil to AAPL 1 (Jan. 27, 1988) (on file with the SMU Law Review) ("It was our understanding that the AAPL JOA Subcommittee was charged with making just a few revisions relating primarily to bankruptcy matters.").

Unfortunately, non-operators remain just as exposed to the bankruptcy of their operator, or the dilution of their programs from less successful programs of the same operator, as they were before the 1989 JOA was issued.

\textsuperscript{64} For example, Mobil wrote to the AAPL that "[t]he escrow concept is theoretically sound, but in practicality would be expensive to administer and for large operators create a new bureaucracy. This whole section should be deleted." Letter from C.E. Reny, Land Manager, Mobil Exploration & Producing U.S., Inc., to AAPL, cmts. art. VIII (Jan. 27, 1988) (on file with the SMU Law Review).

Phillips argued that "[s]uch a provision could require us to open hundreds of accounts." Letter from J.K Bramwell, Land Manager, Phillips Petroleum Co., to AAPL, cmts. at 14 (Mar. 8, 1988) (on file with the SMU Law Review).

Exxon: "[W]e are opposed to the new requirement that escrow or separate accounts for funds advanced for operations be maintained by Operator in all instances." Letter from Omer Humble, Land and Regulatory Affairs Coordinator, Exxon, to AAPL, cmts. at 1 (Jan. 27, 1988) (on file with the SMU Law Review).

Enserch:

\begin{itemize}
\item We strongly recommend . . . deletion of requirements for interest-bearing or separate bank accounts to escrow advances or operating funds which may be impossible for most Operators to administer, particularly large independents or major companies, and practically impossible for Non-Operators to monitor. The idea of protecting Non-Operators from the commingling of their funds by an insolvent Operator is attractive, however, we believe the mechanism described in the proposed form is not workable.
\end{itemize}
\end{enumerate}
\end{footnotesize}
COPAS and the JOA continue to dodge the escrow issue. The JOA does state that operators shall hold funds advanced for the joint account, and that the funds shall remain joint account funds until "used for their intended purpose or otherwise delivered to the Non-Operators." None-theless, this seemingly good start is destroyed by the qualifier that "[n]othing in this paragraph shall require the maintenance by Operator of separate accounts for the funds of Non-Operators unless the parties otherwise specifically agree." Escrowed accounts would create little burden. In this day and age of computers, maintaining separate accounts is a simple administrative task. The industry already requires operators to document the account separately. The JOA makes operators "keep an accurate record of the joint account hereunder, showing expenses incurred and charges and credits made and received." Operators must also be able to document each project's costs and revenues for tax purposes. Thus, operators already have the administrative duty of maintaining separate paperwork. The only additional burden of escrow accounts—a truly insignificant burden—would be asking a banker to keep the accounts separate and thus keep the dollars separate. That is a small price to pay for better non-operator protection.

It is true that operators who use commingled investor funds as a bank, invading the joint account as needed to pay their own bills, will be pinched by an escrow rule. But this is exactly why escrowed accounts are such a good idea. Operators have no business using investor money as interest-free loans. If operators are underfunded, they should have to meet ordinary borrowing standards like any other company.

E. COPAS Should Integrate Its Form into the JOA

One of the oddities of the COPAS form is that it is merely an "exhibit" to the JOA. The industry divides its fundamental financial provisions between the two forms. As a set of contract clauses, the COPAS provisions constitute one of the two or three most important parts of any oil and gas investment contract. Yet many other accounting clauses reside in the JOA.

Letter from Donald J. Weber, Enserch, to AAPL, gen. cmts. at 1-2 (Feb. 12, 1988) (on file with the SMU Law Review). Actually larger companies with more staff should find it much easier to design systems to maintain escrow accounts.

These letters were sent to the AAPL to influence the 1989 revisions to the JOA.

65. 1989 JOA, supra note 2, art. V.D.4.

66. Id.

67. Id. art. V.D.2. COPAS defines the "Joint Account" as "the account showing the charges paid and credits received in the conduct of the Joint Operations and which are to be shared by the Parties." 1995 COPAS art. 1.1; 1984 COPAS art. 1.1.

68. Accord Heaney, supra note 1, at 773-74 (concluding that escrow accounts are the "only fully effective solution which can adequately protect the rights of all parties" and that escrows are a necessary measure to keep capital flowing into industry, even if they are viewed as "radical by many in the industry").
The JOA contains provisions about the pricing of operator-owned equipment, maintenance of the joint account, custody of funds, and cost estimates. It has other provisions, like the clause defining the operator's duty as that of a reasonably prudent operator, that should not limit specific accounting provisions but which arguably could be read to increase the operator's discretion in accounting decisions.

In the event of conflict, the JOA controls over COPAS. This hierarchy of forms leaves room for operators to insert contradictory accounting terms in the JOA and defeat the protection provided by COPAS.

The reason these forms are separate may be that they are promulgated by two groups, the AAPL and COPAS. These groups could easily produce a single, integrated form, with COPAS maintaining control over the accounting provisions. There should be no conflict between the JOA and COPAS.

An investor should not have to compare the COPAS accounting exhibit with the text of the JOA to determine whether they are consistent. The investor is entitled to have all accounting standards in one place. Precise and consistent accounting is so vital to the success of any oil and gas program that the accounting clauses should be in the core agreement, not in an exhibit. These are not minor details. Their placement in the industry contract should reflect their significance.

F. COPAS SHOULD REQUIRE AN AUTHORITY FOR EXPENDITURE ON EVERY WELL, PLUS AN AGREEMENT ON THE EFFECT OF OVERRUNS

One of the features that distinguishes oil and gas investments from most purchases, including many competing forms of investment, is that the exact cost of the commitment is only an estimate when the investor has to decide whether to take the plunge. Costs as well as revenues will depend upon the operator's skill and honesty. This uncertainty increases the non-operators' reliance on the operator and highlights the importance of giving the operator just the right incentive.

69. 1989 JOA, supra note 2, art. V.D.1-2,4,8.
70. Id. art. V.A.
71. Id. art. II.
72. The lack of an integrated form can injure non-operators when they try to customize their accounting provisions. This occurred in True Oil Co. v. Sinclair Oil Corp., 771 P.2d 781, 783 (Wyo. 1989), in which the non-operator tried to limit the operator's profits by entering a separate, controlling agreement that all billing in a very expensive well would be at "Dave True's cost." For the way this provision was defeated by the JOA, see supra note 46.

Putting this exhibit into the primary contract would correspond with the significance reflected in the following accurate description of the accounting "exhibit":

In conclusion, the accounting procedure of the joint operating agreement is more than just an exhibit. Everything in the joint agreement is sooner or later translated into dollars, with the accounting procedure serving as the common denominator to translate all joint activities into reports of expenditures. . . . It is without a doubt an integral part of the success or failure of the deal.

Cook, supra note 1, at 223.
In addition, the fact that most costs will be incurred after the moment of commitment makes the accuracy of the operator's cost estimates an essential ingredient in the investment calculus. One of the skills that operators sell to investors is the ability to predict the cost of drilling wells. The better the operator, the larger its pool of experience, the more careful its work, then the more accurately it can predict drilling costs.

The industry has developed a standardized form known as the Authority for Expenditure which provides an estimate of well costs. Yet COPAS has not standardized the requirement that this vital information be provided to non-operators. It also does not say how the AFE should be prepared, nor does it define the effect of overruns.

Current cost-estimate requirements are highly inconsistent. The requirements that do exist are in the JOA. The JOA has one option under which operators may give an investor estimates of the cost of completion, but the option says nothing about providing the cost of drilling. A competing option does not require any estimate at all on the initial well. Oddly, after the initial well is drilled, the JOA requires more information. Any party proposing to drill a subsequent well or to rework a well must provide written notice of the “estimated cost of the operation.”

73. Observers have called the AFE probably the “most common source of disputes,” Smith, supra note 1, § 12.03(1)(a), and a “trouble area” for joint operations, Young, supra note 1, at 203.

74. “[T]he specialized industry definition of completion is primarily concerned with an event following drilling.” Williams & Meyers, supra note 2, at 212 (quoting Burns v. Louisiana Land & Exploration Co., 870 F.2d 1016 (5th Cir. 1989)). The moment of completion is a moment of truth in many oil and gas investments. The well has been drilled and logged. The partners must decide whether to set casing and produce the well. The operator polls the joint account on whether they want to complete the well. 1989 JOA, supra note 2, art. VI.C. Even in wells in which there is a single AFE for all well operations, completion expenditures ordinarily are set out separately from drilling. As the discussion in the text shows, it is even more common to estimate only completion costs on the first well, if any of its costs are estimated.

75. 1989 JOA, supra note 2, art. VI.C.

The JOA does also state that “[u]pon request of any Consenting Party, Operator shall furnish estimates of current and cumulative costs incurred for the joint account at reasonable intervals during the conduct of any operation pursuant to this agreement.” Id. art. V.D.8. This clause applies to incurred costs, however, not future costs, and will not give investors more information to assist their front-end decision. The reason presumably is that the industry takes the initial investment decision as the commitment to spend drilling funds on the first well.

76. Id. art. VI.B.1. One commentator believes that even though an AFE is not “specifically required for the initial well” under the operating agreement, “[t]he fact of the matter is, however, that under an operating agreement an operator normally does circulate an AFE for the initial well for his or her partners [sic] signature. This takes place even though this AFE is not referenced nor required within the agreement itself.” Moore, supra note 1, § 15.03. Some operators might argue that COPAS need not require them to do something many already do. The purpose of a model form, however, is to standardize practices even for the minority of operators who otherwise would fall short of good standards. At least for operators who do routinely provide AFEs on the initial well, the cost of requiring this AFE would be minimal. The fact that operators need to be equipped to render AFEs on other wells and activities suggests that cost and burden are not really the issue. COPAS should make this AFE mandatory and define its meaning in more detail.
Confusion exists as well over the significance of the AFE. Some courts, buying into the myth that oil and gas operations are matters of pure chance, act as if no one can rely on operator estimates. This confusion over AFEs is enhanced by the variety of ways in which they can be prepared. An operator may use its cost in other nearby wells. If it can get the costs from its competitors, the operator may average the costs of all wells recently drilled in the area. An operator may also collect vendor bids for all major well services on the specific well. A final alternative is to use some combination of these methods. Estimates prepared using each of these procedures still should be adjusted to accommodate any unusual geologic or engineering features.

To provide meaningful and well-understood cost estimates, the industry must require that operators provide an AFE for every well. It makes no sense to provide AFEs for completion and subsequent wells or reworking, but not for drilling the initial well. Particularly in exploratory projects, which by definition are drilling into new fields, the initial well is the riskiest well. It is drilled when the least is known about the geology of the area. Thus, the risk of overruns is greatest. This is the time when non-operators most need the operator's expertise in estimating costs.

Second, the operator should have to disclose the type of information used in preparing the AFE, whether it be the operator's prior costs in the area, other companies' costs, vendor bids, or anything else. This is the only way non-operators will know how much trust to place in the AFE. Operators would remain liable if they possess but do not use relevant information—if they choose a method of estimation because it produces lower costs and so makes their project appear more attractive than it really is. In one case, an operator issued an AFE with a day rate even though it had agreed to drill the well on a more expensive footage rate; in another case, the operator concealed the millions of dollars it knew it would have to spend to handle a hydrogen sulphide problem. An oper-

77. See, e.g., Cleverock Energy Corp. v. Trepel, 609 F.2d 1358, 1360 (10th Cir. 1979), cert. denied, 446 U.S. 909 (1980) (AFEs are “an estimate of cost without binding effect in the industry. . . . It is generally recognized that success and cost figures for oil and gas drilling ventures must, in the present state of the art, be estimates, opinions, and predictions of future exigencies, none of which is actionable in Colorado.”); M & T, Inc. v. Fuel Resources Dev. Co., 518 F. Supp. 285, 289 (D. Colo. 1981) (“It is axiomatic that drilling costs cannot be estimated with certainty and that an AFE is at best a good faith estimate. AFE's are usually exceeded, often by very substantial amounts.”); see Moore, supra note 1, § 15.03 (“Once again, by custom of the industry, it is a known fact that an AFE is merely an estimate of the cost to drill a particular well.”).

78. Jolly & Buck, supra note 1, at 27.

79. The cases are, respectively, Haas v. Gulf Coast Natural Gas Co., 484 S.W.2d 127 (Tex. Civ. App.—Corpus Christi 1972, no writ) and Sedco Int’l, S.A. v. Cory, 522 F. Supp. 254 (S.D. Iowa 1981), aff’d, 683 F.2d 1201 (8th Cir.), cert. denied, 459 U.S. 1017 (1982). Sedco was not an AFE case—indeed, the court suggested that the operator's failure to furnish an AFE could be one basis for liability. Nonetheless, it is an important case on the operator's duty to make whatever estimates it gives accurate. The operator provided a woefully false total-cost estimate. The operator told its wealthy investor, Roy Carver, that it could bring three abandoned wells on line for just $2.5 million, when it knew that a number of problems, including the presence of hydrogen sulfide, would push the cost far
ATOR that fully describes its method of estimation still will be liable if it conceals information that would have shown that the estimates were too low.

If COPAS begins studying the accuracy with which operators have predicted well costs, it can begin determining which methods of estimation are the most accurate. COPAS then can assist the industry in improving its cost-estimating procedures. As the industry organization with expertise in oil and gas accounting, COPAS is an appropriate body to take on this job. It has promulgated industry standards in other areas, from its C.E.P.S. equipment pricing to its publication of overhead rates to, most recently, its decision to publish an annual report describing various ways to measure the performance of oil and gas companies.80

Realistically, lacking outside pressure, this organization of industry companies is not about to adopt performance measures that would force its members to improve their operations. The more successful operators, however, have every reason to press COPAS to adopt AFE standards. Clarification of performance standards, including cost standards, would let the market reward their performance more precisely. The highest performers will benefit if COPAS adopts AFE standards.

Third, the AFE should specify a time, no longer than two weeks, in which the operator will provide notice if the AFE is overrun by an amount that will be specified in contract negotiations. More litigation probably results because operators are too slow to disclose overruns than because of the fact of the overruns themselves. Notice should be required if the total budget is overrun by a fixed percentage, like five or ten percent, or if any single item is overrun by a set amount. (Otherwise an operator might exceed the estimates for drilling by millions of dollars, but not tell anyone because it had not yet exceeded its drilling and completion total. Yet it would be obvious that the well would come in over budget.)

Finally, COPAS should make the parties specify the effect of overruns.81 One common provision is to provide that the operator will absorb higher. Carver was told "there was no way in hell that you could lose," while employees were warned not to tell Carver about the project's cost because it "may scare the old man off." 683 F.2d at 1207. The wells cost over $13 million. The case was tried to the court, which ordered the defendant to repay this money, with interest, because of the defendant's fraud. 683 F.2d at 1204.

80. COPAS, OIL AND GAS PERFORMANCE MEASURES: A RESEARCH PROJECT BY THE FINANCIAL REPORTING COMMITTEE (1st ed. 1994).

81. One viewpoint is that the operator will be careful in estimating costs prudently as long as it is paying a share. Smith, supra note 1, § 12.03(1)(b) (stating that, in general, "[s]elf interest of the party with executive or managerial responsibility may be trusted to protect the interests of the nonexecutive and nonmanaging parties"). Smith does argue that this principle may not apply if the operator only has a very small percentage, its compensation is a percentage of total costs, or if it is using affiliated companies. Id. The problem is that one or more of these problems affect a large share of oil and gas investments.

The contrary view has been that the operator, particularly given the JOA's limitation of liability to gross negligence and willful misconduct (if this applies to AFE preparation and other services to the joint account), has an incentive to underestimate costs and make the project look better than it really is. See Heaney, supra note 1, at 751 (arguing that under JOA liability limitation protecting the operator, it "has therefore been to an operator's
any overrun beyond a certain percentage of total well costs.82 Alternatively, investors may have to pay all good-faith costs regardless of how far they exceed the operator's estimate. The parties should specifically address the effect of overruns before, not after, their investment begins.83

As the use of AFEs becomes more widespread, COPAS should take the forefront in developing AFE performance standards. The predictability of costs may vary by geographic area, but in many areas operators with experience will be able to estimate costs quite accurately. COPAS could create a clearinghouse to collect cost estimates and performance rankings. Were this information available, COPAS could develop benchmarks and rank operators.

If the industry ever gets an accurate source of information on how closely companies predict their drilling costs, the best operators will have

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82. DERMAN, supra note 1, at 61, 183-84 (offering sample provisions for parties to go nonconsent, or have operators absorb costs, beyond a certain percentage).

83. Operators as well as non-operators would benefit from a clearer standard, because it remains quite unclear what effect an overrun should be given if the parties do not spell it out. Some courts seem to assume that no operator can be held to any prediction. See note 77 supra. Others understand that operators have at least some responsibility for their predictions. See note 79 supra.

Howard Boigon has suggested that operators with large overruns might be held liable if they fail to comply with the JOA's duty in article VII.D.3 to request authorization for costs over an agreed amount, although he notes that this clause only applies to operations that are not otherwise covered by consent provisions. Boigon, supra note 1, § 5.04(2); see 1989 JOA, supra note 2, art. V. This provision does not resolve the problem that the parties approach the area of cost estimates with very different expectations and the fact that both sides would be better off if they clarified the effect of overruns.

82. DERMAN, supra note 1, at 61, 183-84 (offering sample provisions for parties to go nonconsent, or have operators absorb costs, beyond a certain percentage).

83. Operators as well as non-operators would benefit from a clearer standard, because it remains quite unclear what effect an overrun should be given if the parties do not spell it out. Some courts seem to assume that no operator can be held to any prediction. See note 77 supra. Others understand that operators have at least some responsibility for their predictions. See note 79 supra.

Boigon argues more persuasively that non-operators might challenge large overruns as not meeting COPAS' article I.1 "necessary and proper" clause or that overruns might violate the JOA's "reasonably prudent operator" standard. Boigon, supra note 1, § 5.04(2). Unfortunately, the 1995 COPAS has dropped the "necessary and proper" language from the definition of "joint operations." 1995 COPAS art. I.1.

Boigon, one of the most dedicated commentators on oil and gas industry forms and a moving force in the 1989 changes to the JOA, suggests at least four options parties might consider on the effect of AFE overruns: (1) having third parties prepare AFE's, to give greater protection on accuracy; (2) allowing an option to go nonconsent or for automatic nonconsent of each or all non-operators if the overrun is above a certain percent; (3) initiating joint decisionmaking with non-operators after certain overruns; or (4) making the operator agree to limit overruns, in essence, making the investment a partial turnkey investment. Boigon, supra note 1, § 5.04(2).
an incentive to publish this information. They should incorporate it into their sales pitch. Operators that pay less attention to costs will have to improve or suffer in the marketplace.

G. COPAS SHOULD COVER ACREAGE COSTS

One of the most surprising omissions from COPAS is its failure to cover a major expense of every oil and gas project, the acreage cost. There is no place in COPAS (or the JOA) for disclosing acreage costs or for describing how the operator should bill for acreage. Nor does COPAS establish a right to audit acreage costs.

One reason for this omission is that the operator ordinarily acquires the mineral interests before it sells its project. This is only prudent: the cost of acreage can rise once landowners learn of the operator's plans. Thus the acreage cost generally is a liquidated amount when the operator markets the investment. The COPAS form, in contrast, tends to govern costs that will be incurred in the future.

Another reason why the JOA and COPAS do not cover acreage may be that the land department generally acquires mineral rights.\textsuperscript{8} In many companies, drilling contracts and other accounting details are arranged by other corporate divisions.

Regardless of why COPAS omits acreage, this anomaly creates a substantial gap in industry accounting protection. Non-operators need to know, and deserve to know, what their dollars are buying. Investors will assume that they are being billed the actual cost of acreage, yet this may not be the case.\textsuperscript{85} The accounting section of the investment contract should spell out the precise basis for the charge. If the operator is earning a separate profit on acreage, rather than simply passing its cost along and intending to make its money by discovering oil and gas, it should have to say so. Then investors could decide whether they truly accepted the risk of the investment.

Inserting an acreage provision into COPAS would bring an added benefit by establishing the right to audit acreage costs. Non-operators should

\textsuperscript{84} Jolly \& Buck, supra note 1, at 22.

\textsuperscript{85} For a sample of cases in which operators misrepresented acreage costs, see Oklahoma Co. v. O'Neil, 440 P.2d 978, 981-82 (Okla. 1968) (operator told investors property was worth more than "the $125,000 price asked," when he knew he would purchase it for $85,000; operator also did not tell the truth that engineer who prepared report and whom operator portrayed as "unbiased and without prejudice" would receive a $10,000 commission on sale); Woodward v. Wright, 266 F.2d 108, 113 (10th Cir. 1959) (operator told investors that property was "worth more" than its price, and that he was taking an interest personally "although he . . . had never before taken an interest in an oil lease," when costs were much lower and hidden markup more than paid for operator's share of the property).

See also the John King acreage manipulations described supra note 43. In addition to money he made off his direct investors, King made profits on acreage supplied to third parties. For instance, King became a finder of properties for the Fund of Funds partnership. A jury later would find that he overcharged the Fund by $48 million by simply marking up acreage, and made another $32 million by arranging fake sales with related buyers. Fund of Funds, Ltd. v. Arthur Andersen & Co., 545 F. Supp. 1314, 1325 (S.D.N.Y. 1982).
be able to inspect acreage documentation, just as they can inspect the basis of other joint account charges; and the operator should bear the same duty to document its charges for acreage that it bears on all other joint account charges.86 This major source of costs does not deserve the special treatment it receives by this COPAS omission.

H. COPAS SHOULD DISPLAY THE NET REVENUE INTEREST

The JOA requires operators to disclose six details about the joint account acreage in exhibit A, including the burden on acreage.87 Nonetheless, this provision often receives only token compliance. The operator lists the leases and the burden on each, but does not calculate the overall net revenue interest—the percentage of the total mineral estate—that will be divided up among the investors.

The JOA's exhibit A listing of leases will not contain enough information to let non-operators judge the economics of the program unless it lists the net revenue interest. This surely is the intent of the requirement that the JOA list the "burden on production."88

While this net revenue calculation can be complex, at least in programs that involve many different leases, the operator must finish the net burden calculation before it prepares division orders or the first distribution occurs. The time when non-operators really need this information, however, is not when they get their first check. That is too late. Non-operators need the information before they decide to invest. That way they will know whether they are sharing seventy-five percent of a project, fifty percent, or something else. This is the only way they can determine the economic interest they will acquire in return for their dollars.89

Being provided a net revenue calculation may be more important to non-industry investors than to industry companies whose land departments ought to be able to run the numbers. Yet even industry companies will benefit from such a requirement. First, the operator may not make enough information available for anyone to determine the net revenue interest. Second, even if the information is available, it is more efficient for the operator who assembles the leases and must determine these in-

87. 1989 JOA, supra note 2, art. II.A. The information the JOA requires is as follows: a "[d]escription of [the] lands; restrictions to depths, formations, or substances; the parties; their percentage or fractional interests; the leases that fall under the agreement; and the burden on production." Id. art. II.A (1)-(6). The JOA conspicuously omits any requirement that the operator list the actual cost of the acreage.
88. Id. art. II.A(6).
89. In the Prudential oil and gas partnerships, for instance, which were set up to acquire producing properties (so fees and overhead should have been minimized), the later partnerships were so heavily burdened that investors would share only 66% of the profits. Scot Paltrow, As Energy Funds Stumbled, Companies Reaped Benefits, L.A. TIMES, June 23, 1993, at A12. One reason there was so little left for the investors was that Prudential and Graham had the highest overhead costs among a group of the major funds. Affidavit of William Jordan, at 4 (Jan. 4, 1994), citing Robert Stanger & Co. report (July 1991) (on file with the SMU Law Review).
Disclosing the net acreage burden should not end the operator’s duty. In addition, operators should have to identify every burden that they created before carving out the mineral interest for the non-operators. For instance, if the operator assigned royalties to company employees after acquiring the leases but before transferring shares to the non-operators, non-operators need to be told.90 Then they would know that they were receiving less than their dollars had purchased. If the operator paid a market price for the acreage, but assigned some interests away before passing the rest along, non-operators will know they are not getting their dollar’s worth. In addition, non-operators would know that company employees might have an incentive to drill marginal properties whose costs they were not paying, on the off-chance of making a discovery.

I. COPAS Should Govern Revenue Practices

Another anomaly in COPAS is that it does not govern revenue practices. Revenue accounting is a significant discipline within oil and gas accounting. Nonetheless, it is not mentioned in the COPAS form. The JOA has a limited revenue clause. It holds that, if the non-operators do not take their production, the operator has the right but not the obligation to sell the production. If the operator chooses to sell the non-operators’ production, it must do so “in a manner commercially reasonable.”91

90. In the Invoil investment, operator Wells-Battelstein carved overriding royalties out of the program acreage for relatives, trusts beneficially owned by relatives, and Robert Hopf, who had been presented as an “independent consultant” for the partnerships. Plain-tiff’s Settlement Conference Statement for Settlement Conference on March 28, 1986, Affidavit of Larry Brandt, supra note 59, ¶ 20. The participation agreement had stated that the partnerships might acquire working interests burdened with royalties that “may be owned by affiliates of Wells-Battelstein,” but the burden had not been disclosed. The head of a company monitoring Wells-Battelstein believed that it “generally acquired the mineral leases directly from the landowners or from independent landmen.” Id. Not only would knowledge of the royalties have led this secondary operator to restructure the investment, but it also “would have caused Invoil Inc. to monitor all aspects of each drilling program with Wells-Battelstein much closer.” Id.

Carving out hidden royalties is a variant on simply paying cash to a consultant whom the operator falsely portrays as independent. Cf. Oklahoma Co. v. O’Neil, 440 P.2d 978, 981-82 (Okla. 1968).

91. 1989 JOA, supra note 2, art. VI.G. The operator’s duty as seller is not the same as its implied duty to its royalty owners to get the best possible price for their production. The 1989 JOA handles an issue that last arose during take-or-pay disputes, claims by some non-operators that they were entitled to share the benefits of their operator’s long-term gas purchase agreements even if the non-operators had not been willing to commit their production to long-term agreements. On this point, the JOA provides that the operator “shall have no duty to share any existing market . . . or to obtain a price . . . equal to that received under any existing market.” Id. The interest owners do not acquire interests in the operator’s contracts. Id.

At the same time, if the operator does sell non-operator production, it should not be able to pay non-operators less than the price readily available simply by passing the production through an affiliate. For a case addressing these issues under the earlier JOA lan-
The reason that revenue accounting has not been treated in the COPAS exhibit is not because of a lack of expertise. COPAS has played a significant role in setting revenue standards. The organization has many revenue accountants in its membership. It has issued a number of bulletins that cover most phases of revenue accounting. Bulletin No. 7 is a 250-page plus report on gas accounting procedures that range from gas measurement to treating, from valuation to royalty and tax issues, including such contentious issues as deductible costs.\textsuperscript{92} Bulletin No. 10, COPAS' basic training manual, contains chapters on "oil and gas revenue" and another on the revenue accounting issues of "production and related costs."\textsuperscript{93} Number 17, an oil accounting manual, is the oil counterpart of Bulletin No. 7, the gas accounting manual.\textsuperscript{94} It includes chapters on measurement, volumes, and pricing. Bulletin No. 23 lays out procedures for revenue audits and includes a detailed list of documents that non-operators should review.\textsuperscript{95} The next Bulletin addresses gas imbalances, an issue of major importance in revenue audits.\textsuperscript{96} Bulletin No. 28 is a task force report covering many of these same gas revenue issues, including gas allocation and imbalances.\textsuperscript{97} Thus, not only does COPAS have expertise in revenue accounting, but its bulletins purport to establish industry standards in core revenue areas. The only oddity about its revenue standards is that, unlike the cost standards, none show up in the recommended accounting form and none form a direct part of the parties' contract.

Unless otherwise agreed, the operator's handling of revenue for its partners should be on the same actual-cost, neither-gain-nor-lose basis as its other services. Disputes frequently arise about which costs the operator can deduct from the revenue, and whether operators can pay one price if they are reselling their partners' production for a higher price.\textsuperscript{98} The JOA's provision requiring operators to pay a "commercially reasonable" price does not resolve these issues. The language itself is a retreat from prior language that required the operator to pay the "best price obtainable," see Atlantic Richfield Co. v. Long Trusts, 860 S.W.2d 439, 444-45 (Tex. App.—Texarkana 1993, writ denied), subsequent opinion on attorneys' fees, 893 S.W.2d 686 (Tex. App.—Texarkana 1995, no writ) (applying AAPL, 1977 Model Form Operating Agreement art. VI.C). The language in the 1989 JOA is the language cited in the text.

\textsuperscript{92} COUNCIL OF PETROLEUM ACCOUNTANTS SOCIETIES, GAS ACCOUNTING MANUAL, Bulletin No. 7 (rev. Apr. 1993).


\textsuperscript{94} COUNCIL OF PETROLEUM ACCOUNTANTS SOCIETIES, OIL ACCOUNTING MANUAL, Bulletin No. 17 (rev. Apr. 1988).

\textsuperscript{95} COUNCIL OF PETROLEUM ACCOUNTANTS SOCIETIES, GUIDELINES FOR REVENUE AUDITS IN THE PETROLEUM INDUSTRY PROTOCOL AND PROCEDURE GUIDELINES, Bulletin No. 23 (Oct. 1992).


\textsuperscript{97} COUNCIL OF PETROLEUM ACCOUNTANTS SOCIETIES, JOINT TASK FORCE GUIDELINES ON NATURAL GAS ADMINISTRATIVE ISSUES, Bulletin No. 28 (Apr. 1990).

\textsuperscript{98} See, e.g., supra note 46.
obtainable. The clause does not mention deductions or affiliate usage. The provision also does not make revenues subject to the COPAS audit provisions or require operators to document the prices they receive when they sell the production.

The meticulous attention that COPAS gives to the costs of drilling a well needs to be carried over to the revenue side. It makes little difference how carefully and efficiently an operator drills a well if it squanders the non-operators' money when it handles their revenue. The accounting provisions should establish investor rights of access to all joint account records. Moreover, they should establish squarely that the operator's treatment of revenue is on the same neither-gain-nor-lose basis as its handling of joint account charges. The operator is not to make a separate profit for handling revenue unless the parties specifically agree to this charge.

J. COPAS SHOULD MAKE OPERATORS PAY INTEREST ON OVERCHARGES

COPAS has long provided that an operator who is not paid promptly can demand interest on the money due. The interest clock begins ticking very quickly—only fifteen days after the non-operators' funds are due.

A balanced investment contract similarly would require operators who overcharge their partners to pay interest from the moment they collect the improper charge. In this way, each party would receive the time value of the money that is rightfully theirs.

Unfortunately, COPAS traditionally made no provision for payment of interest by operators. A non-operator who successfully pursues an audit claim receives prejudgment or postjudgment interest only if it is allowed under state law. In the 1995 contract, COPAS made a slight improvement. This optional form would make operators pay interest if they fail to provide a "substantive response" in detail to non-operator audit exceptions within the specified time limits if the exception is "ultimately granted."

These interest practices remain unbalanced in the operator's favor. As long as the operator provides a "substantive response" in detail, it does not have to pay interest even if it loses or adopts a frivolous position. (Presumably, if the operator's audit response is a refusal to talk or provide documentation, or a claim that the accounting provisions do not apply to the disputed practice, interest would be due. These are not "substantive responses" in detail.) Thus even under the 1995 form, COPAS gives operators an incentive to respond promptly, but to delay pay-

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99. Compare 1989 JOA, supra note 2, art. VI.G. with 1977 JOA art. VI.C.
100. For some examples of the problems that can arise in revenue accounting, see supra note 46.
102. 1995 COPAS art. I.5.B. The 1984 COPAS stated that the "operator shall reply in writing to an audit report within 180 days after receipt of such report," but without specifying any penalty for failing to respond. 1984 COPAS art. I.5.B.
ment as long as possible. That way the operator pockets the interest that accrues in the meantime.

COPAS' indulgence toward operators is illustrated by the draconian penalty it imposes on non-operators who fail to provide a timely audit report or reply. Rather than pay a little interest like the operator, they lose their claims entirely.103

Both operators and non-operators should be entitled to the full time value of their money. Operators earn interest on late payments fifteen days after the payment is due. In a balanced investment contract, operators would have to pay interest on legitimate audit claims, starting fifteen days after the non-operator paid the charges that turn out to be impermissible.

K. COPAS SHOULD DELETE ITS LIMITATIONS-SHORTENING FORFEITURE CLAUSE

Much of the protection offered by COPAS is negated by one short forfeiture clause. In article 1.4, COPAS provides that the operator's invoices shall "conclusively be presumed to be true and correct" unless challenged within twenty-four months of the calendar year in which they are dated.104 As a practical matter, this means that investors must challenge all charges long before the date otherwise allowed under applicable state law.105

The COPAS claims limit is an industry-wide practice that dramatically narrows non-operators' rights. It is a trap that can lead to forfeiture. Drilling and completing a well can take many months. If the operator

103. 1995 COPAS art. 1.5.A. C.
104. 1995 COPAS art. 1.4.A.; 1984 COPAS art. 1.4. COPAS has given non-operators some added protection by providing what one hopes courts would have held anyway (on an estoppel basis), namely that the filing of timely audit reports and responses suspends limitations regarding claims made in the audit report. 1995 COPAS art. 1.5.A.
105. For example, the Texas contract statute of limitations is four years. Tex. Civ. Prac. & Rem. Code Ann. § 16.004 (Vernon 1986). Oklahoma allows five years, 12 Okla. Stat. Ann. tit. 95 (West Supp. 1996); New Mexico, six years, N.M. Stat. Ann. § 37-1-3 (Michie 1990); Alaska, six years, Alaska Stat. § 09.10.050 (1994); and Wyoming, ten years, Wyo. Stat. § 1-3-105(a)(i) (Supp. 1995). Thus the COPAS period, which ends two years after the bill's calendar year, allows roughly between one-half and one-fifth of the protection that these states give to ordinary contract disputes. If non-operators do audit, they have to file their exceptions within 180 days under the new form, so the period can be even less.

One industry commentator claimed some 30 years ago that "[a]s a practical matter, most operators will open their records to you back of this period if your reason is valid, especially for a first audit of the property. However, you can appreciate the inconvenience of having an operator 'dig up' old records." Kennedy, supra note 1, at 164. Oilfield operators are among the few parties entrusted with other people's money who would claim that documenting proper usage more than two years old required digging up "old records." This argument is another example of the naiveté that often invades industry writing about accounting issues. Operators may allow a late audit if they suspect a true mistake, or the amounts involve very little money. Operators who appropriate secret profits or find that the non-operator has a large claim, however, often become quite religious about the claims limitation. Even if they have allowed an audit, they use the clause as a weapon to negotiate a very cheap settlement of the claims.
pre-bills the drilling cost, the gap between the date of the invoice and expenditure of funds may be over a year. A great deal of time may pass before the production is marketed and the non-operators have the first reliable information on the results of a well.  

The two-year period can expire on many well costs before anyone receives revenues. It is likely to have expired long before non-operators have enough information on the success or failure of the project to suspect something is wrong in the accounting. Pertinent state law ordinarily provides a longer period, generally four to six years, for parties to file suit over contract claims. The only function of this short, industry-sponsored limitation (and, of course, the reason operators like it) is to make it likely that non-operators will lose the right to pursue meritorious claims. The provision should be deleted.

The current shorter claims period does, of course, enhance certainty for operators. They have a very short period of time beyond which non-operators are extremely unlikely to be able to challenge billings. Yet operators have little risk from a longer limitations period as long as they comply with COPAS. Non-operators have no basis for challenging legitimate billings. Operators who obey the quite detailed COPAS provisions—provisions that would be even clearer if COPAS adopts the recommendations urged here—will have little to fear from lawsuits in a longer limitations period. Most of any realistic uncertainty is based on improprieties.

Should the industry not delete the COPAS limitations provision, COPAS should at a minimum indicate that this clause is not intended to cloak operator fraud and concealment. While the common law pre-

106. The text calls this clause a forfeiture clause because when it applies, it cuts off all rights a non-operator may have to recover no matter how unfounded the charge. For examples of the harshness with which this provision has been enforced, see Calpetco 1981 v. Marshall Exploration, Inc. 989 F.2d 1408, 1414-16 (5th Cir. 1993) (holding that neither counterclaim in litigation nor two years of negotiations over audit issues were specific enough to form “claim for adjustment”); In re Antweil, 115 B.R. 299, 301, 304 (Bankr. D. N.M. 1990) (applying COPAS to bar claim of non-operator who had been in divorce proceedings at time he noticed overcharges, and who had never been credited with equipment he furnished to joint account; in the court’s words, “[t]he Court finds the result in this case distasteful due to the fact that the defendant is now liable for a debt for which he was over billed and for which he was not given credit for materials he provided.”). One commentator warned operators about their need to adopt proper accounting procedures at the start of a joint project because during development, “[c]oncentration is upon operations, rather than accounting. However, the operator can incur serious economic effects if the formal accounting procedures are not adequate for operations.” Cook, supra note 1, at 199. The converse is also true. Both sides’ concentration is upon the discovery of oil and gas, not accounting details, while wells are being drilled and completed. Maybe operators do lose sight of proper billing practices during this period. But many investors lose track, or do not know that they need to keep track of the operator’s billing practices while they are watching the outcome of the drilling project. This is not a time when their ordinary audit and recovery rights should be expiring.

107. Courts have stated that the claims limitation should not turn into a shield for fraud. Calpetco, 989 F.2d at 1413-14; Caddo Oil Co., Inc. v. O’Brien, 908 F.2d 13, 17 (5th Cir. 1990); Exxon Corp. v. Crosby-Mississippi Resources, Ltd., 775 F. Supp. 969, 976 (S.D. Miss. 1991), aff’d in part, rev’d in part, 40 F.3d 1474 (5th Cir. 1995).

The problem is that the unconditional language of the clause gives operators too much leverage in the majority of disputes, which never reach court. Moreover, COPAS should
cludes enforcement of contracts induced by fraud, a statement to that effect would remove the leverage the clause gives operators when negotiating over concealed, improper charges. In addition, COPAS should allow all concealed claims, not just those that a jury may find were “fraudulently” concealed, to be raised within the full state contract limitations period. Such a rule would punish operators who keep material facts from their investors without turning audit disputes into battles over the operator’s intent.

It is worth noting in passing the anticompetitive effect of a clause that, like the forfeiture clause, reduces the liability of all companies on one side of an industry. In this regard, the claims limitation clause is very different in purpose from actual-cost terms that clarify the basis of the investment and serve the interests of non-operators as well as operators. It would be per se illegal for all operators to sit down at a COPAS meeting and agree on the price they will charge for their programs. The antitrust laws even prohibit agreements that have the effect of setting prices, though the agreements do not fix prices expressly. The claims limitation does not directly set price, but it systematically and uniformly reduces the value of the package sold by each operator who uses the standard form. Thus it has a highly anticompetitive effect on oil and gas

make clear that the clause will not bar claims based on any profits concealed by the operator. Such concealment in violation of COPAS’ actual-cost intention should be actionable and require refunds regardless of the operator’s subjective intent. In other words, the operator should not be able to defend a practice of keeping discounts by arguing that “I never intended to cheat my investors.” This distortion of the investment incentives and structure should be forbidden without regard to intent.

108. A misrepresentation can prevent a contract from being formed, Restatement (Second) of Contracts § 163 (1979); make it voidable by the victim, id. § 164; or provide a basis for reformation, id. § 166.

109. Apparently one of the companies invited to the initial drafting meeting on the JOA declined out of fear for antitrust liability. Young, supra note 1, at 199.

The per se illegality of price fixing is one of the longest-standing rules of the antitrust laws. See, e.g., United States v. Trenton Pottery Co., 273 U.S. 392, 397-98 (1927). This policy is so strong that even agreements that set maximum prices (an agreement one might expect to keep prices down) violate the antitrust laws. See generally Arizona v. Maricopa County Medical Soc’y, 457 U.S. 332 (1982). The principle has been extended to agreements to establish uniform costs and markups. ABA Antitrust Section, Antitrust Law Developments 65 (3d ed. 1992).

COPAS tries to set industry-wide pricing by providing recommended prices for equipment through its C.E.P.S. program. Council of Petroleum Accountants Societies, Computerized Equipment Pricing System, Interpretation No. 15 (May 20, 1986) (“CEPS system provides a consistent and equitable method of material pricing which will be uniform within the industry”); see Jolly & Buck, supra note 1, at 208-09. Its overhead and used equipment pricing terms also standardize prices across a wide range of companies.

The C.E.P.S. system has come under fire lately, but not because COPAS has assumed a role of trying to publicize information needed for rational decisions in the industry. The attack is that the pricing system does not accurately reflect market prices, a criticism of the specific measure used rather than of COPAS’ centralized role. See Susan Richardson & Corby Considine, Revolutions in the Oil Patch, Tex. Law., Oct. 9, 1995, at 32 (citing two Texas cases over C.E.P.S. prices that “appear to be in excess of the prevailing price of tubular goods” and may be more than operator actually paid).

110. ABA Antitrust Section, supra note 109, at 67-73.
investments.\footnote{111}

L. COPAS MUST BE MODIFIED TO FIT DRILLING FUND AND ROYALTY INVESTMENTS

In spite of its shortcomings, COPAS is much better than no protection at all. No effective protection is what faces many investors in drilling fund and large-scale partnership programs. These investors put their money with operators who drill dozens or hundreds of wells in large programs. They only receive documentation for the overall results of the programs. They do not receive invoices, notices, or other documentation on a well-by-well basis. Nor do they have a specific right to audit the expenses.

The scope and lack of documentation in large-scale drilling investments make accountability more difficult to achieve. For this reason, it is even more important that partnership and drilling fund agreements incorporate effective accounting provisions that put the investments on an actual-cost basis. COPAS should adopt and promulgate a separate accounting provision that would apply to large-scale investments.

The investment contract for these programs will be different from the equity-based, single-prospect JOA. For instance, investors will not receive an AFE for each well. They will not vote on decisions involving each well. They also will not receive accounting information by well in the ordinary course of business. Rather than having a joint account for each prospect, accounting will be on a partnership or drilling fund basis. Most of the other principles, however, including most critically the actual-cost basis of the investment, the need to disclose the operator’s profits including those

\footnote{111. Courts have applied the rule of reason to certain trade group restrictions, even to the per se illegal activity of refusing to deal. See \textit{id.} at 86-90. If a rule of reason applies, provisions that facilitate joint operations by reducing monitoring costs, like COPAS’ actual cost structure, might survive scrutiny as pro-competitive measures. It is hard to see a similar justification for an agreement among operators that reduces their exposure at the expense of their consumers, the non-operators. Such a clause would seem to lower consumer welfare.

If price setting provisions like the equipment and overhead escalation sections are judged under the rule of reason, courts will end up balancing the savings in transaction cost from a standard provision against the inefficiency of letting at least some operators set prices above their cost. The shift to a fixed rate per well, instead of billing the actual cost for each well, produced a savings in transactions though the rate varies by operator. It “obviates a detailed audit of district expense.” \textit{Cook, supra} note 1, at 212. Another commentator is even more bullish about fixed rate billing:

\begin{quote}
As far as I am concerned, [the combined fixed rate] is the greatest single improvement in the COPAS Accounting Procedure. It eliminates the argument about whether certain items should or should not be included in an operator’s district expenses. The effort by non-operators in the past to make this determination has involved a considerable amount of audit expense, and argument, and this affords a welcome relief.
\end{quote}

\textit{Kennedy, supra} note 1, at 179. Kennedy also contends that combined fixed rates—rates that include district and general overhead—are “a considerable step” toward “eliminating the most controversial item of cost in joint operations.” \textit{Id.} at 180. Operators would eliminate another expense if they charged industry-wide overhead—they would not have to document their overhead cost—but such billings would remove the incentive for operators to try to improve on the industry standard.
generated through affiliates, and the right to audit both costs and revenues,\textsuperscript{112} are just as important for drilling funds and partnership projects as for joint account programs.

Royalty owners need accounting protection, too. On the cost side, improper charges can prevent completion of a good well, delay reaching payout or other points when the royalty owner’s interest may increase, and inflate charges the royalty interest bears during production. As for revenue, every issue that affects working interests on revenue audits affects royalty owners as well. Yet there is no standard for royalty accounting treatment.\textsuperscript{113} There is not even a formal right to audit. Royalty audits presently occur on sufferance, with no formal agreement as to the scope of the audit. The operators presumably have been motivated by a desire to avoid litigation and formal discovery with its very broad scope of document production.

Royalty owners would not need all of the information provided to equity owners. Like the drilling-fund investor, royalty owners do not participate in operational decisions on their wells, or need AFEs and similar documents. What they do need is actual-cost billing and a right to audit so that they receive the full value of their interest.

COPAS already has addressed many royalty needs. Its many revenue bulletins address issues that concern royalty owners. In addition, Bulletin No. 9 discusses unusual or unique contractual provisions in farmouts, not

\textsuperscript{112} Like the profession of accounting itself, COPAS represents the principle of regulation through the provision of information. The maintenance of an accurate joint account and the right to audit are essential elements of COPAS. The various COPAS Accounting Procedure forms provide that the operator shall maintain accounts and records relating to the Joint Account. In addition, these procedures provide the non-operators the right to audit these accounts and records to ensure that the charges and credits to the joint account are proper. Council of Petroleum Accountants Societies, Documentation Supporting Joint Interest Expenditures, Interpretation No. 21, at 1 (Feb. 14, 1990). “Adequate documentation” is information that “supports and/or otherwise provides credibility that charges/credits to the Joint Account are proper.” Id. Non-operators are “entitled to review all documents” supporting the Joint Account. Id. (emphasis added). If the auditor cannot decide whether a charge or credit is proper, the operator “must provide additional support.” Id. at 2. These are very stringent standards.

\textsuperscript{113} There are a series of widely used leases. Thus one can find common lease forms, \textit{2 Earl A. Brown & Earl A. Brown, Jr., The Law of Oil and Gas Leases §§ 18.01-02 (1990)}; \textit{7 Howard R. Williams & Charles J. Meyers, Oil and Gas Law §§ 699.01-10 (1989)}; and tips on preparing farmouts, Teresa U. Fay, Drafting the Standard Form Farmout Agreement (ABA Monograph No. 1) (1986); John R. Scott, \textit{How to Prepare an Oil and Gas Farmout Agreement, 33 Baylor L. Rev. 62 (1981)}. What is missing is any broad-based industry organization that consciously attempts to define, propagate, and improve the form contract. The lack of organization appears to be reflected in a lower degree of integration in practice as well. See \textit{4 Williams & Meyers, supra note 2. (“The foregoing discussion has demonstrated clearly that the oil and gas lease is far from standardization. Doubtless the forms in current use may be numbered in the hundreds, if not thousands.”). Of course, lack of overall standardization does not mean that leases will not be standardized on clauses in dispute in any given case.

Royalty calculations raise many issues about volume measurement, the proper price, and legitimate deductions that can also affect working interest owners. The courts have had surprising difficulty reaching agreement on their interpretation of the royalty interest. For a recent summary of the debate over cost deductions and take-or-pay pass-through, see John Lowe, \textit{Defining the Royalty Obligation, 49 SMU L. Rev. 223 (1996).}
profits interests, and carried interests—in other words, trouble areas for many royalty owners. What COPAS has failed to do is organize these various provisions into a single, unified form that puts the operator’s accounting duty to royalty owners on a neither-gain-nor-lose basis and provides a right to audit costs that affect the royalty stream.114

III. THE FUTURE OF THE COPAS FORM

Industry companies and participants tend to oppose the recommendations in this Article. They feel the reforms are too burdensome and that experienced companies do not need help.115 COPAS members tend to be accountants employed by large oil and gas operators. It therefore is not surprising that even common-sense reforms like escrow accounts and a general statement of purpose have failed due to criticism by their employers. These companies do not want any increase in their duties when they serve as operators.

Trade groups, which are collections of profit-maximizing firms joined to further their economic interests, can be expected to function on behalf of their members. The idea that business groups maximize self-interest characterizes many studies of the professions, as well as capture theories of how regulated industries relate to their regulators.116 Indeed, market

114. Some of the complexity in royalty treatment is that a lessor may lease its property, retaining a royalty, but its lessee may not end up as the operator. The lessee may transfer its interest to another party. The royalty owner may never bargain with the operator that develops the property. While the problems caused in such situations are beyond the scope of this Article, the industry could deal with some of them by making accounting standards part of the lease, where they would have to be assumed by who acquired a later interest in the property.

115. For examples of the industry concern, see Letter from Donald J. Silberman to John McArthur (n.d.) (on file with the SMU Law Review).

[The JOA and COPAS] are the models, almost always modified, designed to be used by and between industry partners who are all assumed to possess the expertise necessary to function with less-than-perfect disclosure guidelines. Neither set of documents demands full and adequate disclosure which may be necessary for the non-industry investor, nor does either set adequately restrict latitude for chicanery by a larcenous operation.

Id.; see also Letter from Robert J. Green to John McArthur (Mar. 27, 1995) (on file with the SMU Law Review) (noting “I can sense a distinct dichotomy between Operator/ Promoter-Investor deals and ‘Industry Partner’ deals. . . . Perhaps we need two JOA forms!”).


Whenever there is licensure, it is almost invariably in the hands of the existing members of the occupation, who almost as invariably seek to use it to limit entry. In particular, differences in return between such broad classes of occupations as professional and nonprofessional seem considerably larger than can be explained in terms of differences in costs, non-pecuniary advantages or disadvantages, and the like.

Id.

This idea that business organizations can be expected to act in their economic self-interest in a market society is a conservative concept. It goes back to Adam Smith. Smith had no illusions about corporate motivation: “It is to prevent this reduction of price, and consequently of wages and profit, by restraining that free competition which would most certainly occasion it, that all corporations, and the greater part of corporation laws, have been established.” ADAM SMITH, AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS 140 (9th ed. 1976).
efficiency requires that businesses pursue their economic self-interest.

There is no reason to expect the spur of profit maximization to be any less powerful in organizations like COPAS and the AAPL. COPAS describes itself as an organization of 1100 energy related companies. The government of towns corporate was altogether in the hands of traders and artificers; and it was the manifest interest of every particular class of them, to prevent the market from being over-stocked, as they commonly express it, with their own particular species of industry; which is in reality to keep it always under-stocked. Id. at 141.

Smith's awareness of this possibility among producers led him to pen another famous line about trade groups, one de rigeur in antitrust work, about the inevitability of conspiracy among them:

People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices. It is impossible indeed to prevent such meetings, by any law which either could be executed, or would be consistent with liberty and justice. But though the law cannot hinder people of the same trade from sometimes assembling together, it ought to do nothing to facilitate such assemblies; much less to render them necessary. Id. at 145. Smith clearly did not foresee antitrust law.

Smith penned the classic argument that it is the market, not regulation, that provides the best protection:

The pretence that corporations are necessary for the better government of the trade, is without any foundation. The real and effectual discipline which is exercised over a workman, is not that of his corporation, but that of his customers. It is the fear of losing their employment which restrains his frauds and corrects his negligence. Id. at 146. Smith's major contribution was to argue that even given the self-referential nature of economic behavior (as he saw it), the pursuit of self-interest would maximize the productivity of the overall system through the market mechanism, an "invisible hand" that was not so hidden after he wrote The Wealth of Nations.


There are two essential elements of capture theory: (1) that the regulated business groups will act in their economic interest in seeking to capture the regulators; and, critically, (2) that they will have the ability to succeed. Even if the first premise is plausible, capture theorists rarely explain persuasively why regulators will succumb to the regulated, rather than responding to consumers, political agents, or ideological concerns. But see, e.g., Peltzman, supra, at 5-15 (concluding that "[c]ompact, well-organized groups will tend to benefit more from regulation than broad, diffuse groups").

One does not need to agree that regulated entities will capture their regulators to agree with the predicate of these theories, namely, that business organizations will attempt to maximize their interests in an economic system organized to distribute private profit. The second half of the capture equation—will the regulated succeed?—does not come up in discussing a private trade group like COPAS or the AAPL, because the industry companies that will be regulated under COPAS and the JOA are the same companies that draft those forms. In these cases, the regulated visibly control the process of regulation.

117. COPAS Informational Brochure (on file with the SMU Law Review).

One would expect COPAS' constituent oil and gas companies to dominate the organization's policymaking process. As one sign of COPAS' insularity, when this author sought a copy of the 1995 COPAS form, COPAS initially refused even though it was circulating the form as widely as possible among industry companies. The APRC chair explained that while COPAS sought a "broad spectrum of industry experience and expertise," nonetheless, "we cannot easily determine whether input from an individual fairly represents indus-
AAPL is just as much an industry organization. One of its standards of practice acknowledges this orientation when it says that “[i]n accepting employment, the land professional pledges himself to protect and promote the interests of his employer or client. This obligation of absolute fidelity to the employer’s or his client’s interest is primary.”

It is not surprising to find one author discussing the “operator bias” of the JOA. The JOA arose out of a meeting of twenty-seven oil companies, COPAS from a smaller group of industry companies. Critics of the first draft of the 1989 JOA, the most recent JOA, attacked it for not conforming more closely to “industry” practice, meaning patterns already accepted by operators. This is a familiar refrain, one that invariably

try views; therefore it would not be in our industry’s best interest to release the material you requested.” Letter from Terraine Wilson, Chairman, APRC, to John McArthur I (June 7, 1995) (emphasis added). Of course, the purpose of seeking comments ought not just be to mirror industry views. COPAS could commission a survey, not solicit comments, if it wants to be a polling agency. The goal of debate is to introduce new ideas and allow a full and fair consideration of their merits. Debate should bring diversity and improve the final product.

COPAS still refuses to let the public see any of its chapter comments. Many affected parties may never have access to the concerns and thinking within the industry over the industry’s accounting standards.

118. AMERICAN ASSOCIATION OF PROFESSIONAL LANDMEN, Standards of Practice No. 3.


120. Boigon notes:
As an instrument intended to win the approval of large companies that tend to operate, the form reflects an operator bias. And as a document created by the industry, it tends to reflect a basic consensus about industry custom and practice that may be entirely appropriate when experienced industry parties are involved or when all parties are philosophically attuned but may be inadequate in resolving substantial differences among co-owners with different backgrounds, resources or objectives.

Boigon, supra note 1, at 5-3; cf. Bledsoe, supra note 1, at 8-11 (noting “bias in favor of the operator that often exists” in JOA).

For a contrary view, see Cunningham, supra note 1, at 398 (arguing that COPAS does not advantage operator or non-operator, but is neutral). That the form retains a bias, or inclination, favoring the operator should be apparent from the discussion in the text.

121. Kennedy, supra note 1, at 158-59 (noting that the first national COPAS was drafted by 15 representatives drawn from chapters with heavy involvement of major companies, making it easy to contend that the form has “the approval of the major companies”); Young, supra note 1, at 199 (JOA formation).

122. ARCO, for instance, wrote to the AAPL that the initial draft “appears to be broad based modifications to the 1982 form which significantly alter long-standing relationships and traditions.” Letter from Thomas M. Furtwangler, Arco Land Manager, to AAPL I (Jan. 27, 1988) (on file with the SMU Law Review). ARCO continued, “[b]ased upon [our] internal reviews, the proposed agreement is inconsistent with our basic business strategies and philosophies, [and we will] make every effort to avoid its use.” Id. The company’s proposed solution was to give industry companies more voice in the final form: “ARCO feels a much broader based Industry committee must be assembled to develop an agreement which will be effective and highly utilized.” Id.

The Hunt Company criticized the draft too, claiming that it was “somewhat biased in favor of the Non-Operator party.” Letter from George L. Potter, Jr., Hunt Oil Company Senior Counsel, to AAPL 1 (Jan. 29, 1988) (on file with the SMU Law Review). Hunt was afraid that:
welcomes code drafters. The issue is whether they should document existing practices—whether the forms companies arrive at voluntarily are the most efficient—or instead try to raise the industry standard.123 Def-

123. One part of this issue concerns the transactions-cost efficiencies that follow from adoption of any single standard. See supra note 7.

The deeper issue is whether among the range of institutions that might be adopted in common, the more efficient institutions will win out, at least in firms subject to market forces. The theorists primarily associated with the theory that surviving firms will be those that adopted the most efficient practices in firm organization are Ronald Coase and Oliver Williamson. See OLIVER WILLIAMSON, THE ECONOMIC INSTITUTIONS OF CAPITALISM (1985); Ronald Coase, The Nature of the Firm, 4 ECONOMICA 386 (1937). Once one breaks into the firm and begins looking at organizational structure as just another input that can be varied, like land, labor, capital, and technology, neoclassical theory suggests that firms will “apply” organization until the marginal benefit just equals the marginal cost. This assumption of perfect efficiency is the stylized neoclassical model of a marketplace in which all firms operate at the margin “so that a single step will be its undoing” within “a relentlessly taut economy.” ALBERT HIRSCHMAN, EXIT, VOICE AND LOYALTY 9 (1970).

The theory that firms choose the most efficient structures has many assumptions. Perhaps primary among them in this context are the assumption that they know enough to isolate the most efficient structures and that they have enough control to impose their choices. One neoclassicist who began with the assumption that proper understanding would unearth efficiency purposes beneath many institutions, but who has since backed away from that assumption, is Douglass North, like Coase a Nobel prize winner. See DOUGLASS NORTH, INSTITUTIONS, INSTITUTIONAL CHANGE AND ECONOMIC PERFORMANCE 7 (1990) (noting that he had “abandoned the efficiency view of institutions” and that “[r]ulers devised property rights in their own interests and transaction costs resulted in typically inefficient property rights prevailing.”). In addition, the path of change “is shaped by (1) the lock-in that comes from the symbiotic relationship between institutions and the organizations that have evolved as a consequence of the incentive structure provided by those institutions and (2) the feedback process by which human beings perceive and react to changes in the opportunity set.” Id. For agreement from theorists approaching the issue from a very different perspective, see Dimaggio & Powell, supra note 7.

Another problem in applying the efficiency theory to COPAS and the AAPL’s JOA is that the drafters of these forms are overwhelmingly industry companies that frequently serve as operators. It may be that the most profit-maximizing form for an operator is one
ference to industry companies also appears in the Uniform Commercial Code's assumption that standards can be relaxed when transactions are among merchants who should be familiar with industry practices.

The problem with an approach of codifying existing practices is that it tends to bar major changes. If companies always adopted the best standards, there would be no need for written forms at all. Everyone already would be pursuing the most efficient course. Reforms like the 1989 JOA occurred precisely because even many in the industry perceived the need for better standards to deal with certain problems.

The reforms urged in this Article are needed for a number of reasons. First, particularly when non-industry companies are involved, the reforms seal gaps in existing COPAS protections. They would affect those areas where what you hear (at the outset of the investment) is not likely to be what you get. Second, reforms should benefit industry investors just as much as non-industry investors. The reforms bring the operator's incentive more closely in line with the non-operators' incentive—neither will gain unless the joint venture discovers reserves in paying quantities. Enforcing the shared incentive benefits all non-operators, industry and non-industry alike. The provision of accurate cost information before the investment commitment will enable industry companies, not just non-industry companies, to make better investment decisions. Finally, in areas like the AFE where the reforms can lead to increased industry knowledge and overall investment standards, the reforms may raise the efficiency level of the industry as a whole.

COPAS refuses to release the industry comments it considered during the debate over the 1995 form. Its new form retains an operator bias. Obviously, none of the reforms urged in this Article made their way into the 1995 COPAS. The APRC did not grapple with such gaps in COPAS as the lack of acreage or revenue clauses. It considered inserting a statement of purpose, but refused to do so. It did not require prior notice of affiliate use. It did not add any language to govern buybacks, delay payments, or similar arrangements, nor did it pull its discount prohibition out of a COPAS interpretation and make it part of the parties' contract.

Many of the changes COPAS did make favor the operator. Two apparently innocuous changes remove constraints formerly put on the operator. "Joint Operations" are no longer limited to operations "necessary or proper," and COPAS no longer requires operators to be sure that "unusual charges and credits shall be separately identified and fully described in detail." This is encouragement for operators to keep unusual charges and credits secret. It was part of a broader reduction in the level that lets it profit at the expense of its investors. Thus the question of efficiency must include the question: Efficiency for whom?

124. See discussion supra note 117.
125. Compare 1984 COPAS art. 1.1 with 1995 COPAS art. 1.1.
126. Compare 1984 COPAS art. 1.2 with 1995 COPAS art. 1.2. The new form will merely require that "all charges and credits [be] summarized by appropriate categories of investment and expense." 1995 COPAS art. 1.1.
COPAS took a small step toward improving the treatment of interest. Operators who fail to issue any response to audit reports within the new time limits now will have to pay interest (until 1995, there was no penalty for a late operator response). COPAS loosened other provisions, however, easing the twenty-four month limit's impact on operators by letting them supplement bills even after this time if they take a later inventory, need to reallocate a cost from another property, or want to make a government initiated adjustment. In addition, the audit-related penalties remain badly unbalanced. If the non-operator audits the account but does not file its reports and then its replies under the brisk response times, it loses its right to raise claims even within the COPAS twenty-four month period. In contrast, the operator's only penalty for an untimely

127. Id. The retreat from detail is that operators no longer have to describe controllable material in detail, but only by “major Material classifications.” Id.

COPAS already had limited how much information the operator had to provide non-operators. The general requirement, from 1974 forward, has been that most charges only have to be described by “appropriate classifications of investment and expense.” 1984 COPAS art. I.2. This matches the least restrictive of the three billing options that were listed in early COPAS forms. See Kennedy, supra note 1, at 160-61 (describing billing ranging from listing of every item to summary by classification). The 1974 form eliminated the “paragraph A” billing option that made operators list each specific item. JOLLY & BUCK, supra note 1, at 77.

The problem with summaries is that they let operators hide improper charges:

However, I can assure you that detailed billings have their advantages, not the least of which is the satisfaction of the propriety of the charges being made. It is very easy to camouflage doubtful charges in brief summary captions.

Some of the billings we receive are so condensed and captions so inadequate that they are worthless in determining the propriety of the charges and in properly analyzing operating costs.

Kennedy, supra note 1, at 161-62. COPAS' retreat from detail comes at a particularly inappropriate time, because the advent of cheap computing should make it far easier for operators to maintain and reproduce, even by computer disk, very detailed records. If operators were required to provide detailed billings, they would have every incentive to require vendors to submit computerized billings. Charges could be allocated by well and account directly from the vendor's disk. Once the operator and vendor had a system in place for the data transfer, it would require very little labor to maintain.

128. 1995 COPAS art. I.4.B. COPAS already had proposed these exceptions to the 24-month limit in Interpretation No. 22, TWENTY-FOUR MONTH AUDIT PERIOD AUDIT AND ACCOUNTING ADJUSTMENTS (Aug. 1, 1991), which opined that COPAS' claims limitation does not apply to adjustments resulting from an audit of another property or adjustments from government-regulatory audits. The APRC did not indicate why it moved these operator favoring clauses into the claims-limitation provision, but it did not make the penalty for missing the time period the same for operators and non-operators.

All COPAS requires is that the operator issue a “response to an exception with substantive information on denials.” 1995 COPAS art. I.4.B. COPAS does not even punish the operator if its “substantive” information is that “I don’t feel like passing back discounts, which are only mentioned in an interpretation and not the COPAS form, because I view COPAS interpretations as not legally binding.”

129. Under article I.5.A., if the non-operator does not make its report within 180 days of the audit or the 24-month period, “whichever occurs first,” its tardiness “will preclude the Non-operator from taking exception to any charge billed within the time period audited.” 1995 COPAS art. I.5.A. Assuming the operator replies in time, the non-operator's
This operator bias is not inadvertent. The APRC comments to the 1995 form note that “the Audit Committee and two joint interest respondents felt the penalties for non-response should be the same for the non-operators and operator.” The APRC’s explanation for its inaction on this point was that “[t]he JI Committee has addressed this issue several times and has consistently chosen to retain the penalties as drafted; therefore, no change was made.” The APRC gave no reason for its sticking to the prior, discriminatory position.

COPAS has inserted a clause that operator charges for affiliate services or material “shall not exceed average commercial rates.” This provision is similar in purpose to COPAS Interpretation No. 16 on related company charges, and it matches the JOA’s limit on operators’ using their own tools and equipment to “prevailing rates in the area” and “terms and conditions as are customary and usual.” COPAS added a requirement that affiliate records be subject to audit, though this merely restates an existing COPAS interpretation.

The 1995 form rewards operators, however, by suggesting they can avoid affiliate audits entirely. COPAS offers an option to signify that “records relating to the work performed by Affiliates will not be made available for audit.” Given the latitude already built into a standard as loose as “average commercial rates,” suggesting this affiliate audit exception will be disallowed if it does not file a reply within 90 days of getting the operator’s response.}

130. Id. art. I.5.C.
132. Id.
133. 1995 COPAS art. 1.6.
134. 1989 JOA, supra note 2, art. V.D.1. The JOA requires an operator who wants to use its own tools and equipment to bill no more than prevailing rates. “The rate of such charges shall be agreed upon by the parties in writing before drilling operations are commenced.” Id. It would defeat the purpose of this provision to impose this limit on operators if they apply these tools and equipment through their own company, but not if they establish an affiliate to do the same thing. The section is even titled “Competitive Rates and Use of Affiliates.” Even if the JOA provision applies, it does not require notice before the investment begins. Thus investors may find themselves already committed to an affiliate-using program before they know they have a cause for concern. This clause does not make the operator give investors affiliate information early enough for them to use it effectively to determine how their risk was altered.

135. COUNCIL OF PETROLEUM ACCOUNTANTS SOCIETIES, DOCUMENTATION SUPPORTING JOINT INTEREST EXPENDITURES, Interpretation No. 21, at 2 (Feb. 14, 1990), provides that:

If the auditor is unable to determine that the charge/credit is proper, the Operator must provide additional support to substantiate the charge/credit. . . . Additionally, indirectly related source material supporting allocations, journal entries, and similar Operator-generated amounts should not be used as a reason to not provide support. Confidentiality of support will be maintained by the auditor.

This language should be sufficient to require operators to produce affiliate records as promptly as operator records (unless they select the affiliate audit exclusion in the 1995 COPAS).

136. 1995 COPAS art. 1.6.
tion encourages operators to price affiliate services well above cost, yet hide the resulting profit. Affiliate profits should never be immune from audit. All this is a far cry, of course, from an investment in which non-operators would know up front, before they invest, whether an operator was using affiliates and, if so, whether it was collecting more than its cost.

COPAS allows operators to use fixed charges for general well costs, overhead, and certain equipment. Out of solicitude for operators, COPAS has decided to let the operator (but not non-operators) “review the costs associated with any fixed rate and calculate a new rate” after two years. Rational profit-maximizing operators will seek a fixed rate above their actual-costs, so they reap an additional profit (which COPAS does not make them disclose). If they find they gambled poorly and their rate is too low, they can renegotiate. In contrast, non-operators can only challenge a rate once every four years, then only if at least fifty percent or more of them vote to do so, and even then only if their challenge “is supported by factual data.”

137. See id. arts. II.1, IV.1.B, V.1.
138. Id. art. I.8.
139. Id. Moreover, while COPAS says the new rates “shall be in accordance with COPAS recommendations or other procedures approved by the Parties,” COPAS does not recommend overhead base rates, only increases to the base. Id. Thus the operator may set a mark that will yield it an added hidden profit. In spite of its neither-gain-nor-lose principle, COPAS has not established that overhead rates should only be proxies for actual costs.

COPAS must be aware that prevailing rates may yield operator profits. The only reason operators would choose a fixed rate over actual costs presumably would be if the transaction expense of determining their costs was excessive, or if they expect to make a profit. This same dual option appears again in article III.6, in which the operator can bill equipment it furnishes at the “average prevailing commercial rate” or its cost, and in the facilities provisions in article IV. Id. art. III.6.

The industry has been aware of the pitfalls of its lack of guidance on the base overhead rate for years, with at least some recommendations for reform:

This leaves the old nagging problem of what rate to charge for overhead, either separately for administrative overhead or combined for district and overhead. I think this problem can be virtually eliminated if we in the industry would cooperate in the submission of cost data to some petroleum industry organization with a paid staff, which could compile and publish this information. A good deal of study would be required to establish guidelines for reporting forms and the items and allocations of costs included in these forms.

Kennedy, supra note 1, at 181 (emphasis added). Even though there seems to be agreement that the overhead charge should reflect actual cost, COPAS has never put this understanding in writing, or tried to limit the base rate by publishing ceiling rates. See discussion supra note 16.

Both fixed and percentage overhead rates replace practices that encouraged battles over the proper allocation of district expenses. See Cook, supra note 1, at 211-13; Kennedy, supra note 1, at 173-79. Percentage rates have the advantage, probably one for both operator and non-operator, that the cost recovered is closely tied to the operator's level of activity. JOLLY & BUCK, supra note 1, at 120. It also protects the operator in inflationary times. Cook, supra note 1, at 213. The disadvantage is that “it recovers more overhead for the expensive operator than it does for the thrifty or more efficient operator.” JOLLY & BUCK, supra note 1, at 120. Fixed rates, on the other hand, remove much of the connection between the level of activity and the payment (this link can appear in the different rates for drilling, completion, and production periods, but the rate does not vary for the level of activity within these periods). Operators may continue to produce uneconomic wells because the overhead adds to their bottom line.
This is a win-win situation for the operator. If it sets its rate above its costs, it collects extra profit without ever having to adjust its rate. If it inadvertently sets the rate too low, COPAS lets it raise the charge, arguably even above its actual costs.

In equipment, COPAS has done nothing to prevent operators from riding published manufacturers' list prices to higher profits. While COPAS makes operators bill for direct purchases at the price they paid after deducting all discounts, it does not mention discounts or actual-cost for items taken from the operator's inventory. The value billed need only "generally reflect the market value on the date of transfer." COPAS does not tie these billings to the operator's cost, or to any requirement that "market value" should include discounts. Indeed, the 1995 COPAS acknowledges that the price billed may well not be a true going price because it lists as a second pricing option "[a] price quotation that reflects a current realistic acquisition cost." The first option, accordingly, can be above a "current realistic acquisition cost." COPAS knows that published manufacturer's prices often will be much more than a "current realistic acquisition cost."

Without these provisions, a world in which the operator is neither to gain nor lose would present non-operators with operators whose costs vary. Non-operators would have a range of choices that reflect the true, varied efficiency of operators. The repeated provisions in COPAS for billing at average commercial rates instead encourages efficient operators to raise their rates to the average level, rather than use their skill to compete on price.

The 1984 COPAS utilized average commercial rates in its section on operators' using their own equipment and facilities, but provided an incentive for operators to bill their actual cost. Operators had the option of billing their documented actual cost or average commercial rates, but they could only bill the latter minus twenty percent. In contrast, the operator was allowed to charge the published mill price for equipment provided from inventory, even if the published price exceeded its actual-cost. The permission for operators to charge published mill prices, a form of average regional rates, led to problems of operator profiteering.

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140. See discussion supra note 39.
141. 1995 COPAS art. VI.1.
142. Id. art. VI.2.A.

Compare the treatment under the international form. On operator-owned equipment, while charges are not to exceed average commercial rates, the rates "shall be revised from time to time if found to be either excessive or insufficient, but not more than once every six months." AIPN, 1992 INTERNATIONAL ACCOUNTING PROCEDURE art. 2.6. A similar allowance exists for indirect charges. Id. art. 3.5.s.
143. 1995 COPAS art. VI.2.A.(1),(2).
144. See supra note 39.
145. 1984 COPAS art. II.8.
146. Id. art. IV.B.
147. See discussion supra note 39.
The 1995 COPAS expands the area of potential above-cost billing. The provision for operator owned equipment and facilities has been relaxed so that operators can bill their cost or average commercial rates without the twenty percent deduction. The section on material provided from the operator's inventory was, unless otherwise agreed, to be priced at published mill prices. COPAS now has added two more options, a current price quote or historical cost that "reflects a current realistic acquisition cost." COPAS again missed the chance to make operator's bill at their cost, with a ceiling at average commercial rates. A new section for charges from operator facilities "off the joint property" contains a similar smorgasbord of options: allocated actual cost, average commercial rates, or an agreed fixed rate.

COPAS inserted another relaxation of the operator's duty in the equipment area. The 1984 COPAS made operators keep "detailed records of Controllable Material" and take inventories at "reasonable intervals." Operators had to take these inventories at their own expense, just as they paid for other inventories like one COPAS required after a change in operator. The 1995 COPAS only makes operators conduct inventories of "not less than five years," and then only on written request and at the joint account's expense. The expenses of other inventories, including the inventory that is needed if the operator sells its interest, now fall on the joint account.

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148. 1995 COPAS art. III.6. COPAS has at least had the good sense to provide that affiliate charges shall not exceed average commercial rates. Id. art. I.6.

The initial 20% deduction from average commercial rates was an estimate of the profit margin built into those rates. Cook, supra note 1, at 217 (Twenty percent discount "is to eliminate the theoretical profit included in commercial rates. Therefore, the commercial rate less 20 percent is theoretically equivalent to operator's actual cost with interest on investment."). By requiring operators who billed their equipment and facilities at average rates, rather than at their cost, to deduct 20%, COPAS was removing their estimated profit and putting them back on the actual-cost basis. The APRC noted, in explaining its removal of the 20% reduction in the 1995 form, that the deduction "was an unsupported figure the APRC felt was probably larger than today's profit margins." APRC Response to Comments, at 3 (Mar. 1995 Draft). If the APRC thought this deduction was larger than the profit margin in average commercial rates, the solution would have been to reduce the deduction rather than remove it entirely. By letting the operator keep whatever profits are built into average commercial rates, the 1995 COPAS widens the conflict of interest between the operator and non-operators.

149. 1984 COPAS art. IV.2.
150. 1995 COPAS art. VI.2.A.
151. Id. art. IV. A literal reading of the 1995 form would cap these rates at average commercial rates if provided by an affiliate, but does not apply the ceiling to facilities that are directly "operator owned." See id. art. I.6. It would be exalting form over substance, however, to treat operator-owned facilities as permitting a higher profit than affiliated facilities.

152. 1984 COPAS art. V.1.
153. Id. art. V.4.
154. 1995 COPAS art. VII.1.
155. Id. art. VII.2.C. Thus if an operator sells its interest, and so creates the need for an inventory, its non-operators now have to foot the bill. If the non-operators have to oust the operator for wrongful conduct, here too COPAS read literally would make the non-operators pay the cost of the inventory.
The 1995 form is a lost opportunity. COPAS has not resolved its conflict between seeking to be a form that gives operators and non-operators the same incentives by putting all parties on the neither-gain-nor-lose basis, and its desire to further the separate interests of its members. A century ago, believers in evolution might have argued that as COPAS evolves, it will move toward greater inclusiveness and equality. The 1995 form does not evolve in this sense. Instead, it entrenches the interests of operators. As a sadder but wiser generation, we can write that COPAS faces a choice between trying to fulfill the neither-gain-nor-lose principle, or retaining its operator-favoring provisions. Neither law nor industry contracts will move in any direction outside the choices of their participants.

It is not only non-industry investors who would benefit from better accounting protection. Industry companies underestimate their need for more protection under the standard industry contract. Unless they never serve as non-operators, they can have just as much need for full accounting protection as non-industry companies. For instance, by the end of the late 1970s, Davis Oil Company, one of the largest independent operators in the United States, compiled an internal list of "classic audit exceptions." These exceptions were exceptions taken by industry companies that stumbled upon Davis' large variety of self-profiting arrangements. Many of these companies surely felt that the industry remained a hand-shake deal industry among the sophisticated participants. They had little idea that they were losing money to another industry company.

When industry companies are non-operators, they are just as dependent on the operator as their agent as are non-industry companies. More-

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It is true that the "conduct and reconciliation of the inventory can be a significant cost to operations," and it is not surprising to find an earlier observer citing a trend to "reduce the number of physical inventories." Cook, supra note 1, at 195. But by shifting the cost to non-operators and making the procedure elective, not mandatory, COPAS is encouraging some operators to "reduce the number of physical inventories" to zero.

The cost of inventorying physical equipment will vary with the adequacy of the operator's record-keeping system. This is a cost that is entirely within the control of the operator. By maintaining imperfect systems, they can make inventories so expensive for the joint account that they effectively deter inventories. COPAS should leave the inventory requirement on operators. Investors are entitled to know what happens to the parts and equipment bought with their money. It is this pressure that gives operators the right incentive to maintain accounting systems that should make the inventories that do occur as inexpensive and efficient as possible.

156. Plaintiff's Exhibit 64, A.E. Inv. (No. 85-M-1821). The companies listed as having raised one or more of Davis Oil's classic exceptions were all companies who possess industry expertise. They would not believe they needed special accounting contract protection. Yet they fell victim to one or more of the following Davis Oil accounting practices (as compiled in the company's own internal listing): (A) premium pricing; (B) casing and tube reconciliations; (C) deferred payments [delay payments]; (D) unrecovered frac oil; (E) before and after casing point charges; (F) dry and bottom hole contributions; (G) outside consultants billed to the well; (H) failure to credit equipment removed from plugged wells; (I) failure to bill Davis its quarter share after casing point ("promoted interest too long"); (J) freight charges; and (K) volume and prompt payment discounts. Id.

The industry companies that suffered one or more of these practices and took exception are Natural Gas Pipeline, ENI Exploration, Williams Exploration, Texas Oil and Gas, Tesoro, Southland Royalty, Petroleum Inc., Amoco, and Panhandle. Id.
over, as profit-maximizing businesses, it is hard to understand why they wouldn't want formal protection that the operator has not embarked on a frolic and detour to make money even if the project does not produce a single barrel of oil. This dereliction is particularly hard to explain for publicly traded companies, which have duties to their shareholders to maximize long-term profitability. The culture of the industry and camaraderie among major companies seem to overwhelm economic self-interest.

Accurate accounting information is necessary for industry companies to make an informed decision, just as it is for less sophisticated participants. If they cannot rely on initial cost estimates, if costs will be inflated by operators who stray from actual-cost billing, the real economic return of the project will be less than otherwise. The operator's failure to disclose the deficiencies will lead the market to overvalue its offering and distort even industry companies' investment decisions.

Industry companies that insist they don't need standardized accounting protection are, of course, free to modify or jettison the COPAS form. Certainly there are many joint ventures among major companies in which each participant performs its own geologic and engineering analysis. Yet even in these investments, the parties are likely to intend and assume that investment will be on the actual-cost basis common to COPAS. Non-operators have nothing to lose, and a lot to gain, by using a strengthened COPAS form that would impose this standard more effectively.

One reason industry companies that operate some wells and invest in others pay little attention to accounting problems may be that they feel they collect as much extra profit when they are operators, as they lose when they are not. This principle of countervailing profiteering was one of Marvin Davis' justifications for keeping volume discounts from his investors. Yet this version of extremely crude justice for some operators

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Even if the corporate goal is maximizing total revenue rather than profits, or increasing employees or market penetration, or drilling the most wells, it is hard to think of any non-operator's corporate purpose that would be furthered by allowing its operator to drain their joint program through improper charges.

158. Here is how Marvin Davis explained his practice of collecting and keeping discounts:

Q: Okay. Now, were the investors told about those agreements?
A: No.
Q: Were the—did you believe that they were entitled to the benefit of those agreements?
A: No.
does not justify handicapping the industry contract. If the accounting provisions do not force disclosure of operator accounting practices, industry companies that keep a few discounts when they are operators have no assurance that the operators with whom they do business are not extracting dollars on a far wider scale. Furthermore, even if an equality among operators were enforceable, it would be of no benefit at all to the many non-industry investors who have no opportunity to gouge their co-investors at any time because they never serve as operators.

Improving the industry contract has assumed greater importance since 1989. In 1989, the AAPL amended the JOA to disclaim any fiduciary duty. The 1989 JOA announces that “the parties shall not be considered fiduciaries or to have established a confidential relationship.” This is an industry-wide attempt to remove the duty that many courts have imposed on operators who, after all, should be acting as trustees and agents when they handle funds for the joint account. It remains too early to tell whether courts will enforce this effort to exempt the oil and gas industry from ordinary tort obligations. Nonetheless, the additional uncertainty imposed by the fiduciary disclaimer makes full and complete contract protection of even greater importance.

One purpose of this Article is to argue that in this debate, it should be recognized that the neither-gain-nor-lose principle benefits more than non-industry non-operators. Actual-cost billing imposes a benefit for all non-operators, including industry companies. Moreover, accurate AFEs, performance measures, and disclosure of all of the operator’s special agreements gives all non-operators, industry companies and inexperienced investors alike, a far more accurate level of information about a proposed project before they decide whether to invest. Thus, this information can improve performance even for industry companies.

Q. Why not?
A: As I just stated before to you, there was—you had to attain certain levels of business to earn these discounts . . . . Sometimes if a supplier wasn’t performing well we fired them and then the discounts went out the window, but we had to also give a certain volume of business to get even the late payments of the discounts.

Memorandum in Opposition to Defendant’s Motion for Summary Judgment at 149-50, A.E. Inv. (No. 85-M-1821) (citing from Plaintiff AEI’s Deposition attached as exhibits). Davis elaborated, when asked why he felt his investors were not entitled to share the benefits of this agreement:

A: Well, it was industry practice. We never got it from anybody we drilled with and we never gave it because—basic reason was, number one, to attain these discounts you had to do a tremendous volume of business. In other words, you set standards. You do so much business, you’re entitled to a discount. If you didn’t do it, you didn’t get the discount and you could never really break it out so in the industry practice nobody ever gave it because the individual was not responsible for all wells we had to drill to get this thing. It was just in there. That was the basic reason nobody ever gave it.

Id. at 147-48.

159. 1989 JOA, supra note 2, art. VII.A. For some thoughts on whether this clause is enforceable, see Lane & Boggs, supra note 2, at 228-38.
Clearer and tighter standards also reduce the area of disagreement and confusion. Clarification over the treatment of AFEs, systematization of practices over acreage and revenue, and greater precision in actual-cost billing will reduce the number of areas in which investors and operators can have different expectations. In this way, they will reduce the occasions for lawsuits and should make this industry more inviting for outside investors. These improvements in efficiency will be supplemented by greater fairness. The reforms urged here can prepare the industry to deserve an influx of investment when the next tight market arrives in the oilpatch.