

**EXCERPTS FROM
PROPOSITION 103 TESTIMONY**

Michael Miller

3 Q.7 Why is the approach that you recommend and that Mr. Bacon
4 recommends preferable?

5 A.7 At the risk of oversimplification, the estimation of the cost
6 of claims component of an insurance rate involves three
7 steps: (1) the selection of the length of the experience
8 base used in the rate calculation (i.e. 1-year, 2-years, or
9 more), (2) the calculation of the appropriate loss
10 development factors, and (3) the determination of the
11 appropriate trend factors.

12 (1) Experience Base. The selection of the appropriate
13 experience base is a credibility issue which varies from
14 line to line and insurer to insurer. One insurer may
15 have a sufficient volume of data for a particular line
16 of insurance such that it can rely on one year of data
17 for its experience base. Another insurer writing the
18 same line of insurance may require five years of data to
19 satisfy its credibility needs. There is no way to
20 generically determine an appropriate experience base.

21 (2) Loss Development. The calculation of the estimated claim
22 losses is usually achieved by applying loss development
23 factors to known claim losses for the accident years
24 included in the experience base. The CAS in its

1 Statement of Principles Regarding Property and Casualty
2 Loss and Loss Adjustment Expense Reserves encourages
3 actuaries to examine more than one method when estimating
4 claim losses. There are times when the paid loss data
5 can provide the most reliable estimate. At other times,
6 estimates based on reported incurred losses are more
7 reliable. I generally prefer the reported incurred
8 method of calculating estimated claim losses because it
9 utilizes more information than the paid loss method and
10 because the margin for error in the estimate is generally
11 less than for the paid loss method. Both methods are
12 generally accepted actuarial methods. Neither method
13 should always be used in all circumstances to the
14 exclusion of the other method. There is simply no way
15 to write a generic rule that will prescribe a loss
16 development method and at the same time produce rates
17 which are actuarially sound.

- 18 (3) Loss Trends. With respect to loss trends, the situation
19 is much the same as with the loss development factors.
20 There are a variety of acceptable methods for trending
21 losses, none of which is always best. The loss trend
22 factors vary substantially from year to year and from one
23 line of insurance to another. Even during the same year
24 and within a single line of insurance there is a
25 substantial variation in loss trends from one insurer to
26 another. This arises because each insurer's book of

1 business will have different geographical and demographic
2 profiles.

3 For these reasons, the approach that both Mr. Bacon and I
4 have recommended is the actuarially sound approach. I agree
5 with Mr. Bacon when he says there is "little room for generic
6 rules" in this area and that there "may be no other choice
7 but to only closely scrutinize the actuarial support for
8 these estimations of losses". That is the way that every
9 other state a prior approval type rating law handles the
10 administrative challenge.

11 Q.8 In its Preliminary Prayer [Paragraph 22(g)], the Department
12 of Insurance (DOI) appears to suggest that a generic trend
13 factor should be adopted as a result of these hearings. Is
14 that actuarially sound?

15 A.8 No. To attempt to prescribe a single trending method, or
16 worse yet a single trend factor applied to all insurers, will
17 certainly result in rates that are excessive for some and
18 inadequate for others, since the loss trend factors generally
19 vary substantially from insurer to insurer. If a single
20 trend factor were imposed on all insurers, it would be only
21 by pure chance that the resulting rate would be correct for
22 any insurer.

1 Q.9 In his prepared testimony, Mr. Hunter advocated competition
2 in the development of trend factors rather than prescribing
3 a trend factor to be applied to all insurers, and a "generic
4 annual analysis" to be published by the Commissioner. What
5 is your opinion of that proposal.

6 A.9 I agree with Mr. Hunter's statement that all trend factors
7 should be the subject of competition and not prescribed by
8 a single set of rules. His suggestion regarding the annual
9 publication of a set of "reasonable" trend factors sounds
10 fine in theory, but in practice it will promote a set of
11 rigid rules that will ultimately be antithetical to
12 competition. If we are going to have competition, which is
13 the best course for the consumer, it should be the
14 competition rather than limited competition circumscribed by
15 one person's view of what is "reasonable."

16 Q.10 Turning next to the second component of the rate, the cost
17 of claims settlement, Mr. Bacon appears to suggest that
18 generic rules should not be created. Do you agree that
19 generic standards are not appropriate for this component of
20 the rate?

21 A.10 Yes. Commonly the claim settlement expenses, especially the
22 allocated claim settlement expenses, are included with claim
23 losses in the ratemaking formula. The claim settlement

1 expenses vary significantly over time and between lines of
2 insurance. Even within each line, different insurers have
3 different claim settlement expenses. All the reasons for not
4 having generic rules for claim losses apply as well to claim
5 settlement expenses.

6 Q.11 The DOI Preliminary Prayer suggests in a footnote that claims
7 settlement expenses be "capped" at the industry average for
8 the immediately preceding three years for "similar carriers"
9 as the DOI defines that term. Is this proposal actuarially
10 sound?

11 A.11 No. The theory underlying the capping proposal is that claim
12 settlement expenses above the industry average are in and of
13 themselves proof of inefficiencies. That is a false premise.

14 A good claim investigative process aimed at mitigating
15 fraudulent claims could well put an individual insurer above
16 the industry average. The easiest way to reduce claim
17 settlement expenses is to stop investigating claims and pay
18 all claim losses without question. Sound claim settlement
19 procedures benefit consumers because the reduction in
20 fraudulent or exaggerated claim payments can more than offset
21 any added expense.

22 To arbitrarily limit or cap claim settlement expenses in the

1 ratemaking formula is actuarially unsound and will encourage
2 insurers to reduce their claims investigation process. It
3 would be more correct to encourage insurers to increase their
4 efforts to control fraud. No meaningful generic rules can
5 be adopted for this rate component without producing rates
6 which are inadequate for some and excessive for others.

7 With respect to auto insurance in California, there is now
8 a requirement that insurers provide coverage to all good
9 drivers as defined by the law. This means that insurers
10 which, for sound and honorable business reasons, have
11 geographically limited operations within the State will be
12 forced to provide coverage to applicants in areas where no
13 service capabilities now exist. To establish a claim service
14 capability in an area where there are only a few
15 policyholders can be expensive, albeit necessary. To limit
16 or cap the claim settlement expenses in the ratemaking
17 formula will only serve to punish an insurer which was forced
18 into an inefficient situation because of the workings of the
19 law.

20 Further, the part of the DOI proposal that advocates that a
21 three year historical average be used as the basis for
22 expense capping fails to give any recognition to expected
23 trends in claim settlement expenses or to the fixed nature
24 of some portions of the claims settlement expenses (such as

1 rent for claims settlement offices). It is inconsistent with
2 an actuarially sound approach and will produce rates that are
3 inadequate for some insurers.

4 Q.12 The DOI Preliminary Prayer can also be read to say that
5 settlement expenses should be allocated by line and by state
6 based upon written premium. Is that actuarially sound?

7 A.12 No. Allocated claims settlement expenses are, by definition,
8 identified to specific claims. All companies have allocated
9 claims settlement expenses that are state and line specific.
10 This actual expense information should not be supplanted by
11 an arbitrary allocation formula. No arbitrary allocation
12 formulas are necessary or desirable to determine California's
13 specific allocated claims settlement expenses. With respect
14 to unallocated claims settlement expenses, insurers should
15 be allowed to use any California expense data that is
16 available and specifically identified with California. In
17 any event, an allocation formula based on written premiums
18 is inappropriate. Unallocated claims settlement expenses are
19 more closely related to loss activity than to written
20 premium.

21 Q.13 Turning next to the operational/administrative component of
22 the rate, Mr. Bacon suggests no generic rules should be
23 applied with the exception of certain expense disallowances.

1 Excluding for a moment the issue of expense disallowances,
2 do you agree that no generic standards are appropriate to
3 govern this rate component?

4 A.13 Yes. There are important differences in expense levels
5 between lines of insurance and between insurance companies.
6 There is simply no way to create a generic rule that defines
7 uniform expense ratios and trends without discouraging
8 competing levels of service and creating excessive rates for
9 some and inadequate rates for others. Every other state with
10 a prior approval rating law judges the reasonableness of the
11 expense provision in the rate by scrutinizing the actuarial
12 support for the estimated expenses on a filing by filing
13 basis. That is not an exceptionally difficult administrative
14 task, and it is the only way the law can be administered
15 fairly.

16 Q.14 The DOI in its Preliminary Prayer apparently disagrees with
17 Mr. Bacon and proposes to adopt a very specific rule for
18 determining the expense provision in the rate. Could you
19 describe that procedure and tell us whether or not it is
20 actuarially sound?

21 A.14 The proposal made in the DOI Preliminary Prayer is not
22 actuarially sound. The DOI Prayer proposal states that the
23 insurer's expense provision "shall be the lower of the

1 insurer's actual expenses or the "Average Expense". "Average
2 Expense" is defined as the actual average expenses for the
3 immediately preceding three years. Both alternates, the
4 insurer's actual expense or the "Average Expense" are
5 actuarially unsound because the expense provision in the rate
6 should reflect the reasonably expected expenses for the
7 future. The DOI's approach erroneously makes no provision
8 for any trends in expenses. An insurer's past expenses may
9 be instructive in developing the expected future expenses,
10 but the actual past expenses cannot be used mechanically in
11 the ratemaking process.

12 In addition to being retrospective, the DOI's proposal is
13 unsound because it fails to account for differences in
14 service levels, for differences in rate levels and
15 differences in customer bases.

16 Service levels can vary substantially. An insurer that is
17 staffed and equipped to promptly process policy applications,
18 mid-term coverage changes, and answer general questions from
19 customers may have higher expenses than an insurer which is
20 understaffed and unconcerned with prompt service. Insurance
21 consumers are not well-served by punishing insurers which
22 give good, efficient service. A superficial comparison of
23 expense ratios to the industry average is not a workable
24 means of identifying inefficient insurers.

1 An insurer that markets its policies, either directly or
2 through agents, to an affinity group is likely to have lower
3 expenses than does an insurer which markets to the general
4 public. The DOI's proposal will have a tendency to punish
5 those insurers which market to a broad spectrum of the public
6 including the hard-to-insure segments of the market and favor
7 those insurers which market to relatively small, low-risk
8 market segments.

9 The DOI further fails to reflect the so-called "fixed" nature
10 of some of the operational/administrative expenses. An
11 insurer with lower average rates will have a somewhat higher
12 expense ratio, all other things being equal, than a high-
13 rated insurer because of the "fixed" nature of some expenses.
14 There is no good reason to punish low-rated insurers in the
15 way proposed by the Department of Insurance. There are times
16 when premiums increase at a faster pace than the
17 operational/administrative expenses. During those periods,
18 the expense ratios may actually decline. The DOI's approach
19 would erroneously fail to adjust for any expected decline in
20 expense ratios. The DOI's proposal will almost certainly
21 lead to rates which are excessive for some and inadequate for
22 others.

23 The DOI also proposes to allocate all expenses to specific

1 lines of insurance and to California, based on written
2 premiums. Such an approach ignores the fact that some
3 expenses do not vary directly with premium. These are the
4 so-called "fixed" expenses. To the extent that the average
5 rate in California is above the average for all states in
6 which an insurer operates, this approach may allocate too
7 much of the expenses to California. The DOI approach also
8 ignores the fact that some companies have accounting systems
9 that capture actual expense data by state and, thus have no
10 need for an arbitrary expense allocation procedure.

11 Q.15 Now let's return to the issue of expense disallowances. Do
12 you believe that the generic standard proposed by Mr. Bacon
13 and the DOI disallowing certain expenses is proper?

14 A.15 Mr. Bacon and the DOI both propose a generic rule that
15 disallows political contributions, charitable contributions,
16 fines and penalties, institutional advertising and losses
17 from employee discrimination claims. A cap on executive
18 salaries is also proposed as long as it does not make the
19 insurance industry non-competitive with comparable
20 industries. In its Preliminary Prayer, the DOI adds bad
21 faith judgments and any payments to affiliates to the list
22 of disallowances.

23 With respect to the disallowance of expenses in general, I

1 agree with Mr. Bacon that the Commissioner has a right to
2 review expenses. The real problem with generic rules
3 disallowing certain categories of expenses is that there will
4 be no end of self-anointed "experts" coming forward to
5 advance their own theories as to how to manage an insurance
6 company. Each will have his or her own idea as to what
7 social policy should be advanced or inhibited. While this
8 may, to some degree, serve the social policy agenda of the
9 Commissioner in office at the time, in truth it will do
10 virtually nothing to lower insurance rates for the consumer.
11 Here, as in several other areas, the focus is on politically
12 controversial issues that produce endless debate, but the
13 reward for all the time and energy devoted to it is almost
14 purely a psychic reward for those involved in the debate
15 rather than an economic reward for consumers.

16 Further, arbitrary rules disallowing expenses or capping
17 expenses at certain levels will ultimately have an anti-
18 competitive effect to the extent that they suppress rates
19 below the levels of actual costs and thus either drive
20 insurers from California or encourage them to curtail their
21 services in California. The long term result of that process
22 would be higher rates rather than lower rates.

23 The Casualty Actuarial Society, in its Statement of
24 Principles of Ratemaking, addresses the issue of expenses to

1 be included in the rates. The first ratemaking principle
2 states that a rate is the expected value of future costs.
3 This means that any costs expected to recur in the future are
4 to be included in the rate.

5 I recommend that in all ratemaking calculations actuarially
6 sound expense provisions be used. Specifically, the expense
7 provisions should reflect all expenses reasonably expected
8 to occur in the future. This does not mean that the
9 Commissioner has no right to review expenses. For example,
10 expenses such as fines, penalties, employee discrimination
11 judgments, and bad faith judgments should not be expected to
12 recur in the future and, thus, should be excluded from the
13 rate base.

14 I disagree with the Insurance Department's proposal that
15 political contributions, charitable contributions and
16 institutional advertising should be eliminated from the rate
17 base and that executive salaries should be capped.

18 The executive salary issue is pure demagoguery. No one has
19 ever shown that executive salaries for the insurance industry
20 are unreasonable. Nor can it be shown that a cap on
21 executive salaries will have any significant impact on the
22 rates. On the other hand, artificial ceilings imposed on
23 executive salaries could well have a major impact on a

1 company's ability to hire and retain competent executives.
2 Mr. Bacon says the Department will select the cap so as "to
3 make sure the insurance industry is competitive with
4 comparable industries". Such a standard may sound appealing,
5 but it has no real meaning and will necessarily be arbitrary.
6 Other than through the competitive employment market, there
7 is no way to determine the fair worth of an executive that
8 manages the company in a way that delivers a quality product
9 at a low price. We should not penalize a well-managed
10 insurer nor inhibit the ability of insurers to attract
11 excellence in management.

12 No one knows what is meant by institutional advertising.
13 Certainly the Department's definition is arbitrary and so
14 general as to be unworkable. All advertising, institutional
15 and otherwise, accounts for only two-tenths of a percent of
16 every premium dollar. It is a waste of time to debate issues
17 which have no measurable effect on the rate.

18 Corporate charitable contributions are a generally accepted
19 part of a corporate enterprise in virtually every competitive
20 industry, and there is no basis to treat the insurance
21 industry any differently. California and federal tax laws
22 allow such contributions as legitimate business expenses.
23 Thus both California policy and federal policy are plainly
24 designed to encourage this part of corporate behavior. There

1 is no basis for the Commissioner to adopt a contrary policy.
2 Eliminating these expenses will have little or no impact on
3 the rates, but may have an undesired impact on a variety of
4 charitable functions that rely on corporate donations.

5 Finally, there should be no restrictions on lawful political
6 contributions or lawful lobbying expenses. California has
7 specific laws that govern both political contributions and
8 lobbying expenses. That is an expression of California
9 policy on this issue. There is no basis for the Commissioner
10 to adopt her own separate and conflicting policy on these
11 expenditures.

12 Sometimes an insurer's position on an issue may be at odds
13 with the position of the regulator or some consumer group.
14 There are also times when insurers stand shoulder-to-
15 shoulder with the other parties, such as auto safety issues
16 and anti-fraud measures. The great danger is that government
17 will attempt to use rate restrictions to silence insurers in
18 those cases when there are differences of opinion. I believe
19 there should be no regulation on a citizen's right to
20 politically express himself, herself or itself. It is my
21 understanding, and hope, that political expression is
22 protected by a higher law than the insurance rate regulatory
23 statutes.

1 Q.16 Isn't it true that disallowing expenses such as political
2 contributions and charitable contributions from the rate base
3 will not restrict the right of insurers to make those
4 expenditures, but rather that those expenditures must be made
5 by investors rather than ratepayers?

6 A.16 No, that is not true. It is naive to believe that some
7 expenditures belong to investors and some belong to
8 ratepayers. Investors do not make expenditures, they make
9 investments. Investors are not compelled to invest, nor are
10 they compelled to continue an investment. They are free to
11 choose.

12 If the regulator persistently promulgates an inadequate rate,
13 either as a result of suppressing the expense or any other
14 component of the rate, the long term economic consequences
15 fall on the ratepayer, not the investor. Through the free
16 market trading of stock, the value of the insurer's capital
17 is bid down to the level where the percentage return on
18 investments is what the investor demands. To attract
19 capital, the ratepayers must either pay a rate increase so
20 as to increase profits or accept a product that is less
21 secure and of less value.

22 Q.17 Now, let's turn to the fourth and final cost component of
23 the rate. Is this fourth component of the rate commonly

1 referred to as the profit provision?

2 A.17 Yes. This final rate component encompasses two separate rate
3 provisions, specifically the profit provision and the
4 contingency provision. The profit provision is that element
5 of the rate which, together with investment income, provides
6 for an appropriate total return consistent with the cost of
7 capital. The CAS Statement of Principles specifically
8 provides that the profit provision include a "charge for the
9 risk of random variation of the expected costs."

10 The contingency provision is that element of the rate which
11 provides for any systematic variation of the estimated costs
12 from the expected costs.

13 The CAS Statement of Principles further states that these
14 two provisions are to be calculated so that they "provide an
15 appropriate total after-tax return."

16 Q.18 Addressing first the profit provision, will you identify the
17 major items which an actuary must address when estimating the
18 appropriate profit provision?

19 A.18 The major items include the determination of expected
20 investment income net of investment expenses; expected
21 capital gains or losses; expected miscellaneous income;

1 expected federal income taxes; and the appropriate total rate
2 of return. The determination of the appropriate total
3 return, if expressed as a percentage of surplus, will
4 additionally involve issues of leverage and the relationship
5 between GAAP and statutory accounting.

6 Q.19 Mr. Bacon and the Department of Insurance have proposed some
7 generic rules with respect to the determination of the profit
8 provision. Do you believe that it is necessary to adopt
9 generic rules with respect to the profit provision?

10 A.19 No. The appropriate profit provision will vary from filer
11 to filer because the degree of risk varies. There are risk
12 differences in the form of legal organization of the company,
13 types of risks insured, location of risks, catastrophe
14 exposure, extent and reliability of reinsurance programs and
15 the nature of the investment portfolio. All of these
16 factors, among others, contribute to different degrees of
17 risk between insurers and warrant different profit
18 provisions.

19 The generic rules proposed by the DOI in this area appear to
20 place all the focus on returns, and not on rates. Because
21 of the great variety of capital structures, types of business
22 and the other factors I have mentioned, there will always be
23 companies providing insurance at quite low rates but earning

1 relatively high returns. Sound economic theory tells us that
2 this should be encouraged, not discouraged. The DOI proposal
3 would, in general, tend to have the opposite effect.

4 Q.20 Irrespective of sound economic principles, it appears that
5 the Department of Insurance has proposed generic rules on at
6 least some portions of the profit calculation. Would you
7 describe your understanding of these proposed generic rules
8 and tell us whether or not they are actuarially sound?

9 A.20 There are five areas in the DOI proposal that warrant
10 comment:

11 1) Rate of Return on Equity. Mr. Bacon and the DOI propose
12 a generic standard for a fair and reasonable total rate
13 of return in the range of 11.2% to 15%. This standard
14 is not actuarially sound because it does not afford
15 insurers the opportunity to earn a rate of return
16 comparable to the return for other industries with
17 commensurate degrees of risk.

18 2) Leverage Norms. Mr. Bacon and the DOI propose leverage
19 norms which vary by line of insurance. The proposed
20 leverage norms are an incomplete attempt to measure the
21 differences in risk between lines of insurance, based
22 primarily if not exclusively on the magnitude of loss
23 reserves in relation to premium. The proposed leverage

1 norms are not actuarially sound primarily because they
2 do not truly measure differences in risk by line of
3 insurance. In fact, there is no recognized or accepted
4 method for measuring differences in risk by line. In
5 addition, Mr. Bacon made no attempt to measure the
6 difference in risk from state to state or from insurer
7 to insurer.

8 3) Federal Income Taxes. Mr. Bacon testified that the taxes
9 included in the rate formula should be those that the
10 insurer "expects to actually pay." In the Preliminary
11 Prayer the Department of Insurance refers to projected
12 taxes. I completely agree that the federal taxes should
13 be the expected taxes. This means the taxes the insurer
14 expects to pay if the profits projected in the rate
15 calculation were to be actually realized. If the DOI
16 wants to call this a generic rule, it has accomplished
17 nothing because this practice has long been required by
18 sound actuarial ratemaking principles.

19 4) Miscellaneous Income. Mr. Bacon proposes a generic rule
20 for miscellaneous income which requires that all such
21 income be included in the ratemaking process. The
22 Preliminary Prayer makes it clear that the miscellaneous
23 income included should be the projected amount. Once
24 again, this is nothing more than a restatement of what

1 is already required by actuarially sound ratemaking
2 principles.

3 5) Capital Gains. Mr. Bacon's proposed generic rule for
4 capital gains requires that only realized capital gains
5 or losses be included in the rate calculations. The DOI
6 goes further in its Preliminary Prayer and requires that
7 the capital gain amount be the average of the actual
8 realized capital gains for the immediately preceding
9 three years. I disagree with this generic rule. A three
10 year data base is insufficient to determine an
11 actuarially sound estimate of projected capital gains.

12 Q.21 I would like to focus in more detail on three areas:

13 (1) total return targets, (2) leverage norms, and
14 (3) capital gains. Turning first to the total return target,
15 why do you disagree with the Insurance Department's proposed
16 standard for a fair and reasonable total rate of return in
17 the range of 11.2% to 15%?

18 A.21 The range of returns proposed by the DOI is not actuarially
19 sound because it does not provide a reasonable opportunity
20 to earn a return comparable to the returns for other
21 industries with comparable degrees of risk. It is a basic
22 principle of economics that there is an opportunity cost
23 associated with capital. In other words, capital is not free

1 and its cost is based on expected future returns for
2 alternate investments. It is not relevant whether the
3 stockholders or mutual owners of an insurance company
4 currently desire or plan to make alternate investments, only
5 that they could do so. As such, the opportunity cost of
6 capital supporting a mutual organization can be determined
7 in the same manner as for a stock organization. A very
8 important benchmark for determining the cost of capital is
9 the standard set forth in Federal Power Commission v. Hope
10 Natural Gas Co. and cited in California Insurance Company v.
11 Deukmejian.

12 Q.22 As I understand your testimony, it is your opinion that the
13 Department of Insurance has not properly applied the Hope
14 Gas standard in determining its range of returns. What range
15 of returns do you believe is actuarially sound and why?

16 A.22 The data indicates that an actuarially sound return is a
17 minimum operating return of 5.4% which is equivalent to a
18 total return of 16% expressed as a return on GAAP equity.

19 A commonly used measure of risk is the variation in returns
20 from year to year. The greater the swing in likely results
21 for a specific industry, the greater is the risk of
22 investment. A statistical measure of variation is the
23 standard deviation. Based on rates of return published by

1 Business Week and the Insurance Services Office for the years
2 1981 through 1988, I have calculated the standard deviations
3 to be 0.9% for the public utilities industry, 3.9% for the
4 property/casualty insurance industry and 1.6% for all U.S.
5 industries combined. These data mean that approximately two-
6 thirds of the time we can expect the returns for the public
7 utilities industry to be within plus or minus 0.9% of the
8 average return. For the property/casualty insurance industry
9 the comparable band is 7.8% wide (plus or minus 3.9% from the
10 average.)

11 The data clearly shows that rates of return for the
12 property/casualty insurance industry have significantly more
13 variation than either the utility industry or U.S. industries
14 on average. This greater variation in results implies
15 greater risk. This indicates that the rate of return allowed
16 the property/casualty insurance industry should be higher
17 than the return allowed public utilities and higher than the
18 return expected to be realized by the average U.S. industry.

19 The property/casualty insurance industry is one of the few
20 that is subjected to the compound risks of rate regulation,
21 the pressures of the competitive marketplace, and unknown
22 future costs. In comparison, utilities generally operate in
23 monopolistic markets with costs that are reasonably
24 foreseeable.

1 The minimum rate of return on GAAP equity which is selected
2 for the property/casualty insurance industry should satisfy
3 three conditions:

4 a) The selected minimum return should be sufficiently
5 higher than the return allowed monopolistic public
6 utilities in California so as to compensate for the
7 higher degree of risk attendant to the insurance
8 industry;

9 b) The selected minimum rate of return should be
10 sufficiently higher than the return achieved by the
11 average U.S. industry to reflect the greater
12 variability in the property/casualty insurance
13 returns from year to year; and

14 c) The selected minimum rate of return should reflect
15 the added regulatory risk which has been introduced
16 in California by Proposition 103.

17 Recent decisions in California have granted returns of 13%
18 to 14% on GAAP equity to some portions of the monopolistic
19 public utility industry. The insurance industry returns are
20 more volatile than the public utility returns because the
21 insurance industry is subject to competition and does not
22 enjoy a guaranteed customer base.

23 The fact that the insurance industry is subject to greater

1 regulatory risk since the passage of Proposition 103 should
2 not be debatable. Mr. Bacon, in his testimony, agreed that
3 greater uncertainty now exists in the California insurance
4 marketplace.

5 According to Business Week the return on GAAP equity for the
6 average U.S. industry was approximately 15% in 1988. Dr.
7 Irving Plotkin, a recognized economist with substantial
8 expertise in insurance industry issues, has testified in this
9 proceeding that the average return for non-regulated U.S.
10 industries is in the 15% to 16% range.

11 Based on these considerations, the minimum rate of return on
12 GAAP equity for the property/casualty insurance industry of
13 16% is fair and reasonable at this time. Such a return is
14 sufficiently higher than the returns allowed public utilities
15 in California. It is about the same, or slightly higher,
16 than the average return for all U.S. industries and
17 sufficiently recognizes the added regulatory risk in
18 California. Based on this analysis, a minimum 16% return on
19 GAAP equity is a reasonable application of the Hope Gas
20 standard.

21 Q.23 If an operating return of 5.4% of premium equivalent to a 16%
22 return on GAAP equity is the bottom of the range of fair
23 returns, then what return would constitute the top of the

1 range?

2 A.23 An arbitrary ceiling on rate of return is not desirable.
3 Whether a rate is excessive because it produces too high a
4 return should be made on a case-by-case basis. There are
5 significant differences between insurers related to ability
6 to attract capital, legal structure and the type of business
7 insured. Differences in capital structures are positive and
8 pro-competitive and should be encouraged, rather than
9 discouraged. A generic rule dictating a maximum return,
10 without regard for these differences in capital structure,
11 would tend to discourage diversity. It would also create an
12 ironic situation in which a rate that is lower than other
13 approved rates may be disapproved as excessive, for the
14 single reason that it generates a higher than average return
15 based upon the capital structure of an individual insurer.
16 A ceiling rate of return should, therefore, be approached
17 with great caution and it would be wiser, in my view, not to
18 engage in this effort at all.

19 It is also not clear that a maximum need be specified in a
20 competitive market. If an insurer prices its product to a
21 return that is in excess of what the market is allowing, it
22 will lose its customer base. The customers are free to
23 choose their insurer and they will choose the low cost
24 providers no matter what profit provision is factored into

1 the rate.

2 Further, the regulatory standard of excessiveness applies to
3 the rate charged, not the total rate of return. If an
4 insurer, either through efficiency or for some other reason,
5 is able to provide a below average rate which happens to
6 include a relatively high profit provision, then no one is
7 harmed. In that case, both the insurer and the customer will
8 benefit.

9 If the Commissioner determines to use the top end of a target
10 return range as a hard and fast ceiling on returns in
11 California, then the most appropriate benchmark would be
12 higher than the 21% return level which has been adopted by
13 the New York Insurance Department. The New York Insurance
14 Department, after a lengthy review of what would constitute
15 an "excess" profit, has concluded that excess profits are
16 not earned until the industry exceeds 21% averaged over a
17 six year period. There is no reason to believe that any
18 lower figure for what would constitute "excess" should exist
19 in California.

20 If on the other hand, the Commissioner seeks to use the top
21 end of the range not as the basis for absolute disapproval
22 of rates but rather simply as a benchmark to determine when
23 further review of a rate application is warranted, then a

1 return of 19% would be sufficient. Economist James Vander
2 Weide has calculated the correct return for a
3 property/casualty insurer of average risk to be 18.25%. A
4 19% return, used as a benchmark for further rate application
5 review, would appropriately incorporate Vander Weide's
6 calculations.

7 However, I believe that each insurer should be able to
8 present evidence based on unique circumstances which would
9 justify a higher return. It would not be appropriate for
10 the Commissioner to automatically disapprove rates which were
11 relatively low merely because they happened to include a
12 profit provision greater than my recommended range. The rate
13 approval process must adequately reward the low cost
14 providers.

15 Q.24 Now let's turn to the issue of leverage ratios. Why are
16 leverage ratios important to the ratemaking process?

17 A.24 The leverage ratio is important in ratemaking because it is
18 used to translate any target rate of return expressed in
19 terms of statutory surplus or GAAP net worth to a return
20 expressed as a percentage of premium. Every provision that
21 goes into a rate must necessarily be expressed as a
22 percentage of premium.

1 Q.25 Is it appropriate to impose a single set of leverage norms
2 line by line on all insurers, as set forth in the DOI
3 Preliminary Prayer?

4 A.25 No. In order to understand why different insurers maintain
5 different premium to surplus ratios, it is important to
6 consider the reasons for the existence of surplus.
7 One of the most important reasons for maintaining surplus is
8 to protect the company's ability to pay claims to its
9 insureds in the event of an unusually large claim(s)
10 occurrence. Property/casualty insurers are exposed to
11 potentially large claims from a variety of sources. Two of
12 the most important sources are earthquakes and hurricanes.

13 Many companies protect their customers from the risk of
14 insolvency due to a particularly large catastrophic
15 occurrence through the use of reinsurance. Other companies
16 rely upon their own capital/surplus base. Either is a valid
17 approach, but all other things being equal, it is more cost
18 effective to protect against insolvency by means of owned
19 capital and surplus rather than through reinsurance.

20
21 Many companies write a significant portion of their
22 commercial lines business on retrospectively rated programs.
23 Under these programs, if losses exceed the original expected
24 amount, some of the difference is recovered from the insured

1 through the retrospective rating mechanism. Thus, all other
2 things being equal, a company writing retrospectively-rated
3 business has a lesser need for surplus than a company which
4 does not.

5 For these reasons, as well as those pointed out by Mr.
6 Bailey, who has testified previously, the leverage ratio will
7 necessarily vary from insurer to insurer and should,
8 therefore, not be generically treated but rather should be
9 left to review as part of company specific rate hearings.

10 Q.26 Are the leverage norms proposed by Mr. Bacon and in the DOI
11 Preliminary Prayer actuarially sound?

12 A.26 No.

13 Surplus is indivisible and exists in its entirety to protect
14 all lines of insurance in all jurisdictions in which the
15 insurer does business. Given the indivisibility of surplus,
16 it is only appropriate to calculate a total rate of return
17 for all lines of insurance combined. That is the reason why
18 the NAIC calculates an operating profit by line rather than
19 a total return by line.

20 Mr. Bacon testified that he intended to selected his leverage
21 norms so that they would average to approximately 2 to 1 for

1 all lines combined. Mr. Bacon's premium to surplus ratios,
2 however, do not in fact average to 2 to 1. The use of a 1.3
3 to 1 ratio for workers compensation distorts Mr. Bacon's
4 average substantially. If a more appropriate ratio for
5 workers compensation were used, Mr. Bacon's overall average
6 would be in excess of 2.7 to 1. This illustrates the
7 distortion that can be created by attempting to create line
8 by line leverage norms. The 2 to 1 overall premium to
9 surplus ratio has been standard in the industry and has
10 served well for a long time. As set forth in Exhibit D
11 attached hereto, the overall industry average premium to
12 surplus ratio over the past twenty years has been
13 approximately 2 to 1; for each of the past ten years, the
14 average has actually been below 2 to 1.

15 This amount of leverage represents the collective judgment
16 of those who have actually been responsible for dealing with
17 the risks faced by the industry and thus is entitled to great
18 weight. If an insurer is adequately reinsured and has a
19 typical exposure to catastrophe, a 2 to 1 premium to surplus
20 ratio is appropriate and is a sound practice. The 2 to 1
21 ratio is the only ratio that has broad acceptance among
22 insurers and regulators and thus, the proper approach is to
23 use a uniform leverage ratio of 2 to 1 across all lines for
24 prospective rate regulatory purposes. To the extent that a
25 company has an extraordinary exposure to catastrophic loss

1 or otherwise significantly different from average, it should
2 be allowed the opportunity to justify a lower leverage than
3 2 to 1.

4 Q.27 Is there any generally accepted way of measuring differences
5 in risk by line of insurance?

6 A.27 No. No one either within the industry or outside the
7 industry has ever been able to develop a generally accepted
8 method of measuring hypothetical differences in risk between
9 different lines of insurance.

10 According to Mr. Bacon, the DOI has selected their proposed
11 leverage norms primarily on the ratio of loss reserves to
12 premium for each line. Apparently this was an attempt to
13 measure the uncertainty surrounding the calculation of loss
14 reserves.

15 The uncertainty of the loss reserving process may well be
16 one appropriate consideration, but it certainly does not
17 represent the totality of the risk differences. In fact, an
18 analysis of industry loss reserves over the last five years
19 suggests the significant uncertainty in estimating loss
20 reserves exists only for the medical malpractice and other
21 liability lines of insurance. (See Attachment E, attached
22 hereto.) Even this potential uncertainty for medical

1 malpractice and other liability lines may be explained by the
2 fact that some of these loss reserves are initially
3 established at a discounted level. In any case, the
4 significance of this data is that for the industry as a whole
5 -- which was the apparent basis of the DOI's analysis -- the
6 relationship between loss reserves and risk is far weaker
7 than Mr. Bacon hypothesized.

8 Q.28 Are there other measures of risk?

9 A.28 Yes. Another measure of the risk can be determined by
10 analyzing the variability of the operating profits over a
11 period of years. Under this analysis, the greater the
12 variation in operating profits, the greater the indicated
13 risk. The variation in operating profits provides somewhat
14 different, but in some ways more complete, measure of risk
15 by line. The variation in operating profits approach is not
16 solely dependent upon loss reserve levels, but includes
17 variation in loss reserves among the things it measures.
18 Based on this measure, the personal lines appear somewhat
19 less variable than the commercial lines. This approach has
20 drawbacks as well. For example, it is likely that, prior to
21 1989, the variability in operating profits for the earthquake
22 line would not have indicated the true measure of risk
23 inherent in that line.

1 Yet another approach to evaluating the risk of individual
2 lines of insurance is to review the actual leverage ratios
3 used by insurers which specialize in particular lines of
4 insurance. A.M. Best and Company categorizes insurers based
5 on the lines which they predominantly write. Using the top
6 ten writers in each category, I determined that the actual
7 leverage ratios were:

8	Property Insurers	1.0:1
9	Commercial Casualty Insurers	1.9:1
10	Auto Physical Damage Insurers	2.1:1
11	Medical Malpractice Insurers	1.7:1
12	Commercial Auto Insurers	1.6:1
13	Fidelity & Surety Insurers	1.2:1
14	Personal Lines Insurers	1.6:1

15 The determination of risk is a classic example of where
16 perception is 100% of reality. That is the reason for
17 considering the actual leverage ratios used by insurers in
18 writing the various lines of insurance. The actual ratios
19 reflect the professional assessment of risk by the insurers
20 who specialize in particular lines of business and regulators
21 throughout the United States. This approach indicates that
22 personal lines is viewed as no less risky than many of the
23 other lines. No matter what level of risk we finally
24 determine to be "right", it will be the perception of risk

1 by the insurers which dictate their actions in the
2 marketplace.

3 In Exhibit F attached hereto (page 1), I have ranked the
4 lines of insurance based on four criteria: (1) the
5 Department of Insurance estimations; (2) the ratio of loss
6 reserves to premiums; (3) the variations in operating
7 profits; and (4) the assessment of professional risk managers
8 for insurers who specialize in certain lines.

9 The DOI's leverage norms illustrate the fallacy of relying
10 so heavily on loss reserves for risk assessment. Earthquake
11 is a classic example of a low frequency, high severity
12 coverage that is risky but has a relatively low level of loss
13 reserves. This was an obvious example of a case where the
14 DOI's methodology failed and they arbitrarily assigned a
15 different norm to earthquake than that indicated by loss
16 reserves. But the failures in the methodology were not
17 limited to earthquake. The DOI has ignored the risk inherent
18 in other lines, such as fire insurance, which is not
19 reflected in the level of loss reserves.

20 Finally, the difference between the risk assessments made by
21 professional risk managers and the hypothetical risk
22 assessments produced by any or all of the three approaches
23 discussed above tends to show that the professional judgments

1 of risk managers -- who have to live with and stand behind
2 their judgments on a day to day basis -- differ markedly from
3 the hypothetical results generated by any theoretical model
4 or approach. This makes one skeptical of artificial leverage
5 norms generated by loss reserve calculations or any other
6 theory that purports to estimate risk by line of insurance.

7 Q.29 Using the approaches you have described, what conclusions
8 can you reach about premium to surplus ratios?

9 A.29 The only valid conclusion that can be reached is that there
10 are a variety of approaches to the issue of risk
11 determination, those analyzing the issue vary widely on the
12 approaches used, and there is no single approach that is
13 generally accepted as reliable. The only tested and reliable
14 standard is an industry-wide overall 2 to 1 premium to
15 surplus ratio. It would be a mistake for the Commissioner
16 to attempt to impose any other standard. Attempts to create
17 line by line ratios will be, by definition, arbitrary. Line
18 by line premium to surplus ratios, therefore, should not be
19 adopted.

20 Q.30 Having determined a range of reasonable total returns, how
21 would you recommend that the Commissioner apply those factors
22 in regulating prior approval of rates?

1 A.30 A reasonable approach and one that would be easy to
2 administer is to convert the range of total returns to the
3 resulting range of operating returns for use as guidelines
4 in administering California's prior approval law. In the
5 attached Exhibit B, I have mathematically converted the range
6 of total returns I recommend to a range of operating returns
7 of 5.4% to 7.0% of premium.

8 In translating the total returns to operating returns I have
9 used industry-wide data. It is to be expected that the
10 projected investment income and the ratio of GAAP equity
11 returns to statutory surplus returns will vary materially
12 from insurer to insurer. These are examples of unique
13 situations which can be handled in the filings on a case-
14 by-case basis.

15 There are several advantages to using operating returns as
16 guidelines. Eventually any return must be converted to a
17 return on premium in order to introduce it into the
18 ratemaking formula. Operating returns are widely used by
19 regulators in administering prior approval laws. The NAIC
20 uses operating profits to evaluate results by line of
21 insurance. Most importantly, operating returns are more
22 understandable to the public because they focus solely on
23 the profits arising from the insurance operation and tell

1 the consumer what percentage of his or her premium dollar
2 goes to profit.

3 The use of operating returns would satisfy the requirement
4 of Proposition 103 because, as shown in Exhibit B, all income
5 is mathematically reflected in their determination.

6 Filers should have the opportunity, on a case-by-case basis,
7 to prove the necessity of any exceptions to any guidelines
8 so as to reflect any unique circumstances.

9 Q.31 The third generic rule proposed by the DOI with which you
10 have disagreed relates to the treatment of capital gains.
11 Why is the three year experience period recommended in the
12 DOI proposal insufficient to determine projected capital
13 gains?

14 A.31 Three years is insufficient because of the substantial
15 fluctuations which exist in capital gains from year to year.
16 An experience period of ten to twelve years is necessary to
17 develop a reliable estimate of expected capital gains. To
18 see this more clearly I would ask you to refer to my Exhibit
19 C, page 1, column 5. Note how the results fluctuate and also
20 keep in mind that we are looking at industry-wide data. When
21 individual insurer data is used, the fluctuations will be
22 much more dramatic. The DOI's approach will result in

1 undesirable instability in the rates for each insurer.

2 Q.32 Having determined the appropriate profit provision are their
3 any other components of the rate which must be considered?

4 A.32 Yes. One final provision in the rate which must be included
5 for prospective ratemaking is the contingency provision. As
6 I stated earlier, this is the charge for any systematic
7 variation of the estimated costs from the expected costs.

8 We can expect the actual costs to vary randomly from year to
9 year around the expected costs. If the variation is random
10 and not biased, then over a period of time the actual results
11 will average to the expected. However, if there is some bias
12 or systematic variation in the rate setting process, then the
13 average actual results will not equal the average expected
14 results. It is this potential systematic variation which
15 the contingency provision is intended to measure.

16 The contingency provision is not just another name for
17 profit. The profit provision reflects the risk of random
18 variation around the expected costs. The greater the degree
19 of random variation, the greater is the risk and, therefore,
20 there is a need for a higher profit provision. The
21 contingency provision has nothing to do with the degree of
22 random variation, it merely measures the bias, or systematic

1 variation, in the results.

2 Suppose one calculates rates each year with a 0% profit
3 provision which one expects to produce a break-even profit
4 level. Further assume that despite our best efforts the
5 actual results average over time to a 5% loss. In this
6 situation, there is some sort of bias in the rate setting
7 process. One can no longer realistically expect to realize
8 a break-even profit level with a 0% profit provision in the
9 rates. The history tells us that we should expect a 5% loss
10 when a 0% profit provision is included in the rates. The 0%
11 provision becomes a pro forma amount and the true expectation
12 becomes minus 5%. The contingency provision corrects for
13 this bias and, to the extent possible, makes the profit
14 provision in the rate formula the true "expected profit",
15 rather than just a pro forma provision.

16 The contingency provision provides for any losses or expenses
17 which have not been anticipated in the rate formula. If we
18 knew what those contingencies were going to be next year,
19 we would just include them in the loss and expense
20 provisions. We only know that losses and expenses beyond
21 those reflected in the rates have occurred in the past and
22 will likely arise again. Some contingencies just cannot be
23 included in the loss and expense projections, no matter how
24 sophisticated the actuarial process.

1 For example, the rate regulatory process itself gives rise
2 to contingencies. In any rate filing, there are many
3 assumptions and judgments which must be made. Around each
4 judgment there is a range of reasonable judgments which could
5 be exercised. If some judgments were made on the high side
6 of the range of reasonableness and others on the low side,
7 then we would expect the total judgments and the resulting
8 indicated rate level to be unbiased. Sometimes in the rate
9 regulatory process there is a tendency to make all judgments
10 at the low end of the range of reasonableness. When all the
11 individual judgments are compounded, we no longer have an
12 unbiased estimate of the true rate level needs.

13 Like the other rate components, the value of the contingency
14 provision varies from insurer to insurer, line to line, state
15 to state, and over time. The actual quantification must be
16 left to the individual filing, as it is in all other prior
17 approval states.

18 Q.33 Are there any other aspects of prospective ratemaking upon
19 which you would like to comment?

20 A.33 Yes. Despite my discussion of a range of rates of return
21 and ranges of leverage norms, which are intended to introduce
22 a measure of flexibility and reality into the DOI's "generic

1 methodology" approach, I would like to reiterate that prior
2 approval rate regulation has worked best in those states
3 where the regulator has attempted to emulate the competitive
4 market. Prior approval regulators have long recognized that
5 prospective ratemaking is not mechanical and that both sound
6 judgment and reasonable flexibility is required if rates for
7 individual insurers are to satisfy the regulatory standards
8 and coverage is to be widely available to the public. It
9 remains my view that the quest for "generic standards" is,
10 in reality, an effort to substitute a mechanical formula
11 developed without the concrete facts of a specific insurer.
12 In the long run, it remains my opinion that generic formulas
13 will serve more to hamstring the ability of the administrator
14 to develop and exercise informed judgment than to aid in
15 efficient administration of California insurance regulation.
16 We should not confuse the bureaucratic desire to easily
17 process the paper associated with the rate filings with the
18 need for the efficient administration of the rate standards
19 in the law.

20 Q.34 Does this conclude your direct testimony?

21 A.34 Yes.

TARGET OPERATING RETURNS

	<u>Col. A</u>	<u>Col. B</u>
1. Total Rate of Return, after tax (% GAAP Equity)	16.0%	19.0%
2. Ratio of GAAP Equity Return to Statutory Surplus Return*	1.10	1.10
3. Total Rate of Return, after tax (% Statutory Surplus)	17.6%	20.9%
4. Expected Investment Income on Capital/Surplus, after tax	6.9%	6.9%
5. Target Operating Return, after tax (% Statutory Surplus)	10.7%	14.0%
6. Standard Premium to Surplus Leverage Ratio	2:1	2:1
7. Target Operating Return, after tax (% Premium)	5.4%	7.0%

* Source: Insurance Facts, published by Insurance Information Institute.

Summary of Investment Returns
Before Federal Taxes
Industry Data

(000) omitted

Source: Best's Aggregate & Averages

Year	(1) Mean Cash & Invested Assets	(2) Net Inv. Income	(3) Return % (2)/(1)	(4) Real. Cap. Gains	(5) Return % (4)/(1)
1979	\$139,965,071	\$ 9,116,816	6.51%	\$ 273,097	0.20%
1980	160,286,360	10,920,656	6.81	532,650	0.33
1981	175,152,171	13,220,318	7.55	284,581	0.16
1982	187,420,307	15,007,069	8.01	594,731	0.32
1983	202,755,088	15,986,825	7.88	2,112,290	1.04
1984	215,205,968	17,659,729	8.21	3,063,213	1.42
1985	239,224,353	19,507,866	8.15	5,483,244	2.29
1986	286,540,656	21,924,445	7.65	6,874,220	2.40
1987	337,512,616	23,959,981	7.10	3,335,320	0.99
1988	381,264,322	27,723,269	7.27	2,725,466	0.71
			7.53		1.09

Year	(6) Unreal. Cap Gains	(7) Return % (6)/(1)	(8) Extra. Taxes Misc. Income	(9) Return % (8)/(1)
1979	\$2,334,013	1.67%	\$ -659,264	-0.47%
1980	4,049,429	2.53	-595,076	-0.37
1981	-2,661,842	-1.52	201,798	0.12
1982	2,957,163	1.58	-814,463	-0.43
1983	1,348,944	0.67	-258,714	-0.13
1984	-2,859,447	-1.33	302,635	0.14
1985	5,227,344	2.19	37,303	0.02
1986	2,026,770	0.71	89,952	0.03
1987	-3,026,471	-0.90	-327,249	-0.10
1988	2,703,298	0.71	- 67,038	-0.02
		0.52		-0.09

Sources:

- Col. 1 - Annual Statement, page 2, line 8a
- Col. 2 - Annual Statement, page 4, line 8
- Col. 4 - Annual Statement, page 4, line 9
- Col. 6 - Annual Statement, page 4, line 19
- Col. 8 - Annual Statement, page 4, lines 29 & 30

Net Investment Income - 1988
After Federal Taxes

(000) omitted

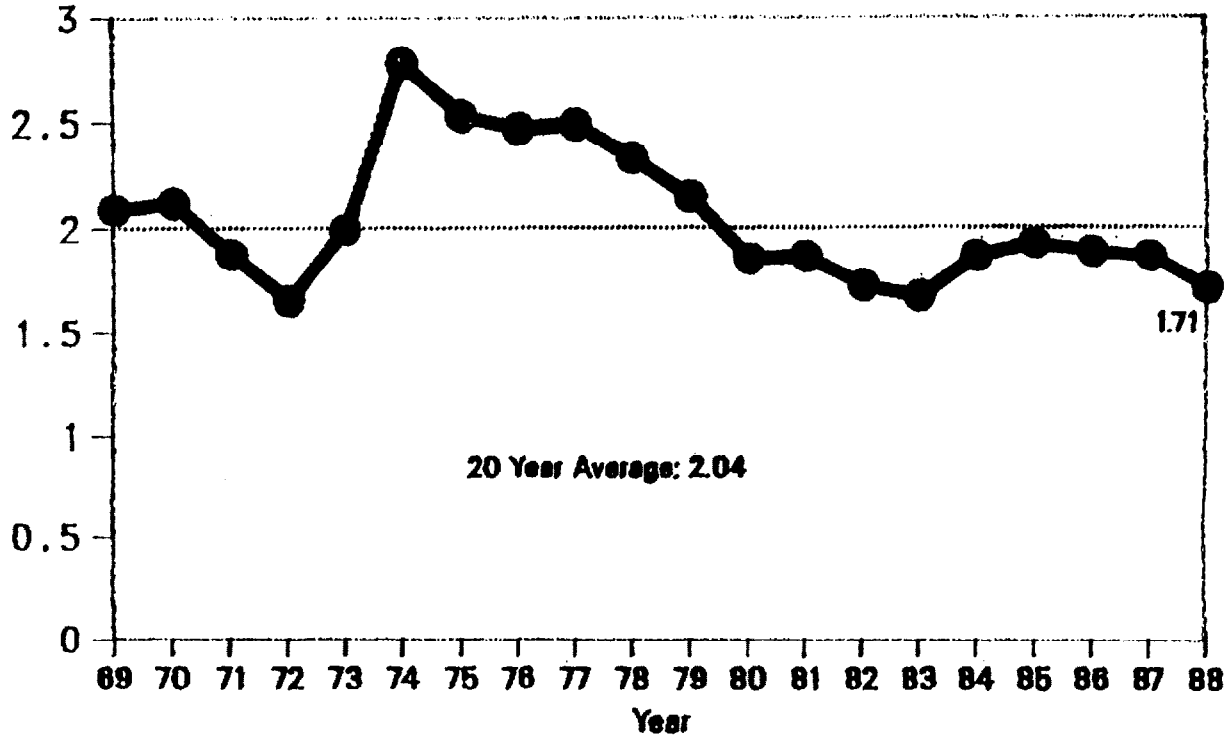
a) Investment Income (A.S. Part 1, Page 6, Col. 8, Line 10)	\$ 29,553,082
b) Tax Exempt Interest (A.S. Part 1, Page 6, Col. 8, Line 1.1)	\$ 10,261,775
c) Dividends (A.S. Part 1, Page 6, Col. 8, Lines 2.1 + 2.11 + 2.2 + 2.21)	\$ 3,103,971
d) Tax Rate $[(.34 \times (a - b - .80c)) / a]$.193
e) Net Investment Income (A.S. Page 4, Line 8)	\$ 27,723,269
f) Net Investment Income, after taxes $[e \times (1 - d)]$	\$ 22,372,678
g) Mean Invested Assets	\$381,264,321
h) Return % (f/g)	5.87%

**Net Investment Income - 1988
After Federal Taxes**

(000) omitted)

a) Net Investment Income, after taxes	5.87%
b) Realized Capital Gains, before taxes	1.09%
c) Realized Capital Gains, after taxes (.66 x b)	0.72%
d) Unrealized Capital Gains, before taxes	0.52%
e) Unrealized Capital Gains, after taxes (.66 x d) (per NAIC tax formula)	0.34%
f) Extraordinary Taxes plus Miscellaneous Gains, before taxes	-0.09%
g) Extraordinary Taxes plus Miscellaneous Gains, before taxes (per NAIC tax formula with tax rate applied only to Miscellaneous Gains)	-0.06%
h) Total Investment Return, Expected for 1988 (a + c + e + g)	6.87%
i) Selected Investment Return on Mean Invested Assets for 1989, after taxes	6.9%

**Property Casualty Insurers
Historical Ratios of Net Written Premium to
Policyholder Protection Funds
1969-1988**



Source: A.M. Best Company's 'Aggregates and Averages', 1989.

EXHIBIT E

RETROSPECTIVE TEST OF RESERVE ACCURACY

<u>LINE OF BUSINESS</u>	<u>AVERAGE CHANGE IN LOSS RESERVE ESTIMATES</u>
Medical Malpractice	38.3%
Other Liability	20.4%
Workers Compensation	5.4%
Multi-Peril Lines	4.6%
Automobile Liability	1.3%
Summary of "P" Lines	4.1%
Summary of "O" Lines	3.0%

Source: Bests Aggregates and Averages
 Schedule P, Part 2, 6 year development
 averaged over 4 years
 Schedule O, Part 2, 2 year development
 averaged over 3 years

Lines of Insurance
Grouped by Degree of Risk

Exhibit F
Page 1

<u>Insurance Department</u>	<u>Ratio of Loss Reserves to Premiums</u>	<u>Variation in Operating Profits</u>	<u>Risk Managers Assessment</u>
Medical Mal.	Medical Mal.	Fidelity	Property
Umbrella/Excess	Other Liab.	Comm. Multi-Peril	Fidelity/Surety
Prof. Liab.	Aircraft	Other Liab.	Comm. Auto
Earthquake	Auto Liab.	Medical Mal.	Personal
Product Liab.	Comm. Multi-Peril	Burg. & Theft	Medical Mal.
Surety	Fidelity	Comm. Auto P.D.	Comm. Cas.
Other Liab.	Surety	Comm. Auto Liab.	Auto Phys. Dam.
Auto Liab.	Boiler & Mach.	Allied	
Farmowners	Fire	Boiler & Mach.	
Comm. Multi-Peril	Farmowners	Other Lines	
Aircraft	Homeowners	Surety	
Fidelity	Allied	Inland Marine	
Business Owners	Inland Marine	Farmowners	
Spec. Multi-Peril	Burg. & Theft	Fire	
Auto Phys. Dam.	Glass	Aircraft	
Homeowners	Auto Phys. Dam.	P.P. Auto Liab.	
Fire	Earthquake	Homeowners	
Allied		P.P. Auto Phys. Dam.	
Inland Marine			
Glass			
Burg. & Theft			
Boiler & Mach.			

RATIO OF UNPAID LOSSES
TO
NET WRITTEN PREMIUMS

<u>LINE</u>	<u>RATIO UNPAID LOSSES TO PREMIUMS WRITTEN</u>
Medical Malpractice	4.179
Other Liability	2.672
Reinsurance	2.290
Workers' Compensation	1.929
Aircraft	1.513
International	1.459
Auto Liability	1.215
Ocean Marine	1.168
Group Accident/Health	1.091
Credit	1.012
Commercial Multi-Peril	.988
Fidelity	.817
Other	.762
Surety	.761
Financial Guaranty	.673
Boiler & Machinery	.470
Fire	.470
Credit Accident/Health	.464
Other Accident/Health	.432
Farmowners	.397
Homeowners	.386
Allied Lines	.369
Inland Marine	.316
Burglary & Theft	.288
Glass	.169
Auto Physical Damage	.130
Earthquake	.108
AVERAGE	.983

SOURCE: Best's Aggregates and Averages 1989
Pages 62 and 64

POSITIONS ON DETERMINATION
OF THE FOUR ELEMENTS OF AN INSURANCE RATE

	COST OF CLAIMS (Claim Losses Paid and Incurred)	CLAIM SETTLEMENT EXPENSES (Expenses Associated with the Claims Settlement Process)	OPERATIONAL ADMINISTRATIVE EXPENSES (Sales and Administrative Expenses)	COST OF CAPITAL (Provisions for Profit and Contingencies)
BACON	Any Generally Accepted Actuarially Sound Methodology	Any Generally Accepted Actuarially Sound Methodology	Exclude Specified Expenses Any Generally Accepted Actuarially Sound Methodology	11.2 to 15% Target Total Return With Line By Line Leverage Norms
461 DOI PRAYER	Generic Cost Trend Factors (As Yet Undeveloped)	Capping of Expenses at "Three Year Average Expense Level"	Exclude Specified Expenses Capping of Remaining Expense At "Three Year Average Expense Level"	11.2 - 15% Target Total Return With Line By Line Leverage Norms
FIREMAN'S FUND	Any Generally Accepted Actuarially Sound Methodology	Any Generally Accepted Actuarially Sound Methodology	Any Generally Accepted Actuarially Sound Methodology	Risk Free Discounted Cash Flow Methodology
MILLER	Any Generally Accepted Actuarially Sound Methodology	Any Generally Accepted Actuarially Sound Methodology	Any Generally Accepted Actuarially Sound Methodology	5.4 to 7% Operating Return Based on 16 to 19% Target Total Return At Industry Average Leverage

California Dwelling Changes In
Replacement Cost - Indexed Area Adjustment Factors

Indexed Area Adjustment Factors

	<u>5/15/86</u>	<u>5/15/87</u>	<u>6/1/88</u>	<u>6/1/89</u>
Southern Los Angeles County	1.000	1.007	1.044	1.074
San Diego County	1.000	1.024	1.056	1.200
Fresno	1.000	1.026	1.061	1.010
San Francisco Area 940 Zip Code	1.000	1.021	1.070	1.112
Marin County	1.000	1.028	1.069	1.118
Del Norte & Humboldt Counties	1.000	0.936	1.008	1.048
Sacramento	1.000	1.040	1.072	1.104
Siskiyou, Trinity, Shasta & Tehama Cos.	1.000	0.832	0.936	0.960

Area Adjustment Factors are indexed to the 5/15/86 factor.

Source: E.H. Boeckh

**NONRECURRING EXPENSES EXCLUDED BY
ACTUARIAL PRINCIPLES**

Bad Faith/Punitive Damage Judgments

Fines and Penalties

Employee Discrimination Judgments

**RECURRING EXPENSES NOT EXCLUDED BY
ACTUARIAL PRINCIPLES**

Charitable Contributions

Political Contributions

Lobbying Expenses

Institutional Advertising

INSOLVENCIES OF CALIFORNIA P-C INSURERS
 UNDER THE CONTROL OF THE CALIFORNIA INSURANCE
 COMMISSIONER AS OF JUNE 1989

Name	Date of First Legal Action	Last Year of Date Filed Before Action	Premium To Surplus Ratios				
			1st Year Prior	2nd Year Prior	3rd Year Prior	4th Year Prior	5th Year Prior
Signal Ins. Co.*	09-23-75	1974	3.2	1.2	1.1	1.7	1.5
Imperial Ins. Co.*	09-23-75	1974	5.7	2.2	1.8	3.3	2.5
Eldorado Ins. Co.	08-02-78	1977	9.4	9.9	7.7	14.1	6.1
Independent Indemnity Co.	02-28-84	1982	5.4	3.9	2.1	3.1	5.1
Surety Ins. Co.	05-23-84	1983	1.5	1.4	2.3	3.2	1.6
S&H Ins. Co.	01-28-85	1983	5.1	2.1	1.5	1.7	2.8
Mission Ins. Co.**	10-31-85	1984	5.7	0.9	0.8	1.0	1.5
Mission National Ins. Co.**	11-25-85	1984	3.4	0.8	0.7	1.0	0.1
Enterprise Ins. Co.**	11-26-85	1984	1.5	0.9	0.7	0.9	0.7
TMIC Ins. Co. (formerly Ticor Mortgage Co.)	04-10-86	1985	0.7				
Mission American Ins. Co.** (formerly Transport Indemnity Co.)	02-02-87	1985	1.2	1.6	1.3	0.9	1.5
Homeland Ins. Co.	05-06-87	1985	6.0	3.7	4.5	2.3	2.1
COMPAC Ins. Co.**	04-07-88	1987	0.1	0.7	0.1	0.0	1.0
Great Falls Ins. Co.	05-25-88	1987		3.9	2.1	1.0	2.3
Coastal Ins.	02-02-89	1987	1.7	2.8	1.8	0.9	0.5
No. Companies			14	14	14	14	14
No. under 2.0			6	7	9	9	8

Sources: NAIC Report (June 1989) "Multi-State Departmental Supervisions, Conservatorships, Rehabilitations and Liquidations", A.M. Best

* Imperial Ins. Co. is a wholly-owned subsidiary of Signal Ins. Co.

** Member of the Mission Insurance Group.

Private Passenger Auto Insurance
 Premiums* and Leverage** (Adult Good Driver)
 California

<u>Company</u>	<u>12/31/88 Group Premium To Surplus Ratio</u>	<u>Inglewood, CA</u>	<u>Menlo Park, CA</u>	<u>Eureka, CA</u>
1	1.5 to 1	\$ 1,319	\$ 626	\$ 516
2	2 to 1	1,541	768	605
3	2.5 to 1	2,168	822	683
4	3 to 1	1,771	699	600
5	4 to 1	1,602	636	614

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- * Premium Data Obtained From May 2, 1988 DOI Premium Survey based on Full Coverage with BI/PD coverage of 100,000/300,000/50,000 and comparable medical payment, uninsured motorist, comprehensive and collision coverage.
- ** Premium to Surplus Ratios are the 12/31/88 Ratios (rounded to nearest 0.5) for each Insurer Group as stated in A.M. Best Reports.

CALIFORNIA HOMEOWNERS INSURANCE
 PREMIUMS AND LEVERAGE
 AS OF 9/15/88

<u>Company</u>	12/31/88 Group Premium to <u>Surplus Ratio</u>	<u>Torrance</u>	<u>San Mateo</u>	<u>Eureka</u>
		<u>\$200,000</u>	<u>\$200,000</u>	<u>\$200,000</u>
1	1.5 to 1	\$ 566	\$ 552	\$ 610
2	1 to 1	566	533	566
3	2 to 1	682	699	621
4	2 to 1	588	542	590
5	3 to 1	576	611	650
6	3 to 1	550	576	584

SOURCE: DOI Homeowner Premium Survey Draft of 10/14/88
 and A. M. Best Co.

Note: Premium to surplus ratios rounded to nearest 1/2.