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EARTHQUAKE INSURANCE: A PROPOSAL FOR COMPULSORY COVERAGE

I. INTRODUCTION

On January 1, 1985, a new law requiring insurance companies to offer earthquake insurance went into effect. The new law provides that no policy of residential property insurance may be issued, delivered, or initially renewed in California unless the named insured is offered coverage for loss or damage caused by the peril of an earthquake. Failure to accept the offer within a thirty-day period creates a conclusive presumption that the insured has elected not to accept the coverage, and the insurance company is not required by the new law to repeat the offer.

The legislative objective, as set forth in the statute, is two-fold. The first objective is to promote awareness of earthquake insurance. At present, only five to seven percent of California homeowners carry earthquake insurance. The second objective is to preclude recovery for loss caused by or resulting from an earthquake unless the policy specifically indemnifies against the risk of earthquake loss. The statute provides that in the absence of an endorsement or an additional policy provision specifically covering the peril of earthquake, no policy shall provide, or shall be held to provide coverage for any loss or damage when earthquake is a proximate cause regardless of whether the loss or damage also directly or indirectly results from, or is contributed to, concurrently or in any sequence by any other proximate or remote cause, whether or not covered by the policy. (emphasis added).

The underlying purpose of the legislation is to reduce the potential for insolvency faced by insurance companies, as a result of recent

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1. CAL. INS. CODE, adding Chapter 8.5 (commencing with § 10081) to Part I of Division 2 of the Insurance Code (Stat. 1984, Ch. 916, at 46).
4. Id.
court decisions\(^5\) which have expanded insurance company liability by the doctrine of concurrent proximate cause.\(^6\) Under this doctrine, the named insured can recover for losses resulting from natural peril—even when the policy specifically excludes such coverage—if a proximate cause of the loss was covered under the insured’s “all-risk” policy. The burden of proof is on the insurer to demonstrate that no proximate cause of the damage is covered.\(^7\) Of further concern to the insurance industry is the threat of extensive punitive damages for bad faith failure to settle.\(^8\)

Since insurance companies could ultimately be liable for billions of dollars in claims in the event of a significant earthquake in a major metropolitan area,\(^9\) the insurance industry sponsored a series of legislative proposals that eventually resulted in the passage of A.B. 2865.\(^10\) This new law purports to preclude application of the well-settled doctrine of concurrent causation to earthquake-related casualty claims: the issue thus arises whether the courts will reverse their

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5. See infra notes 58, 62, 66, 70 and accompanying text.
6. See infra note 62 and accompanying text. The concurrent proximate causation doctrine, as applied in Partridge, infra note 62, allows an insured to recover for losses resulting from an excluded (uninsured) peril if a covered peril was a concurrent proximate cause of the loss.
7. R. Keeton, Basic Text on Insurance Law 270-73 (1971); see generally SCEPP, supra note 2, at 4. Under an “all-risk” policy, all perils within a particular category are covered unless otherwise excluded. Cal. Ins. Code § 102(a) (West 1976) defines “fire insurance” to include “Insurance against loss by fire, lightning, windstorm, tornado, or earthquake.” Although policies differ, common exclusions include such perils as loss due to enemy attack or invasion, rebellion, war, ordinance or law, nuclear hazards, neglect, earth movement, and flood. It should be pointed out, however, that coverage for some of these excluded perils may be purchased separately, but for relatively higher premiums.
8. In Garvey v. State Farm Fire and Cas. Co., 1CIV AO17878, Ct. of Appeal, 1st Dist., a San Francisco Superior Court jury assessed $35,000 in compensatory damages and $1,000,000 in punitive damages against State Farm for refusing to settle a claim by Marin County man, Jack Garvey, who lost part of his home due to earth movement. State Farm is appealing the decision. See also Insurance Unfair Claims Practices Act, Cal. Ins. Code § 790.03 (West 1972 & Supp. 1985).
9. One source estimates that an 8.3 earthquake in the Los Angeles area would result in the loss of between 15,000 and 69,000 lives, and upwards of $50 billion in damages, depending on the location of the epicenter and the time of day. SCEPP, supra note 2, at 1; see also K. Steinbrugge, Earthquakes, Volcanoes, and Tsunamis, An Anatomy of Hazards at 220-28, 294-95 (1982) (The 1906 San Francisco earthquake had a magnitude of 8.3 on the Richter scale, and resulted in over 700 deaths). Id.; see also Commissioner's Report, California Dept. of Insurance, California Earthquake Zoning and Probable Maximum Loss Evaluation Program (1983) (There have been four editions of this report, hereinafter cited as the CEZ/PMLE Program Report (Year)). Although individual insurance companies cover themselves by purchasing “reinsurance” from other companies, the effect of several companies simultaneously exceeding their surpluses would have a devastating effect on the insurance industry.
10. See supra note 1.
trend and give the new statute the strict interpretation desired by its sponsors.

This comment will review the new statute, and discuss why its approach is inconsistent with its intended objectives. A more effective approach is required, one that would provide coverage, while at the same time minimize the adverse elements of uncertainty and potential insolvency. Therefore, this comment proposes an alternative system based on a theory of compulsory earthquake insurance.

In order to appreciate the significance of this recent statute and to gain a useful perspective when weighing the various factors, it is important that the reader understand the development of the concurrent cause doctrine, the unique rules of construction applied to insurance policy interpretation, and the crucial role of insurance in the disaster recovery process.

Therefore, Part II of this comment will describe the crucial role of casualty insurance and its relationship to risk distribution and loss allocation in the disaster recovery process. Part III will review the development of the doctrine of concurrent cause, and its application to casualty insurance policies. Part IV will discuss some of the unique aspects of insurance policy interpretation and highlight some potential areas of conflict with the new law. Finally, Part V will describe and propose an alternative approach to the underlying problem of how best to distribute the risk and to allocate the potential loss resulting from, or caused by earthquakes. In contrast to the "mandatory offer" approach set forth in the new addition to the Insurance Code, this comment proposes a program of compulsory earthquake insurance for all California property owners.

II. THE ROLE OF INSURANCE IN DISASTER RECOVERY

A. The Coalinga Earthquake

The 1983 Coalinga earthquake\footnote{Low, \textit{Coalinga Quake Causes Tremors in Insurance Law}, L.A. Daily J., Aug. 1, 1983, at 1, col. 6. On May 2, 1983, an earthquake measuring 6.5 on the Richter Scale struck the central valley town of Coalinga, Cal. which has 7,000 residents. As a result, 47 people were injured, over 500 buildings were damaged, and total costs were estimated at $31 million. Perlman, \textit{Coalinga Quake Mysteries Indicate Hidden Hazards}, S.F. Chronicle, Dec. 6, 1983, at 1, col. 5. Earthquake magnitude, or the amount of energy released by an earthquake, was originally defined by Professor Charles F. Richter of the California Institute of Technology in Pasadena in 1935. Measurements are made with a seismograph, hypothetically located at a point 62 miles (100 kilometers) from the center of surface energy release (epicenter). The Richter Scale is logarithmic, with each whole number representing a magnitude of energy approximately \textit{31.5 times} the lower number. Therefore, the 1964 Alaska earthquake, which measured 8.5, released almost \textit{1000 times} as much energy as the earthquake in Coalinga, at} presented a dramatic example
of the role of casualty insurance in the event of a natural disaster. At the same time, however, it generated considerable anxiety within the insurance industry over the issue of potential industry insolvency.\[12\] Concerned about the adverse ruling in Garvey v. State Farm the previous year,\[13\] the various insurance companies paid out on approximately seventy percent of the claims that resulted from the Coalinga earthquake, although only a few Coalinga residents actually carried earthquake insurance.\[14\]

Given the relatively moderate magnitude of the Coalinga tremor, along with the relatively low population and density of the area, the unprecedented number of claim settlements made it apparent that a major earthquake in a large, heavily populated metropolitan area such as Los Angeles or San Francisco might force insurance companies to become liable for claims in excess of available reserves.\[16\] The new provisions of the Insurance Code would theoretically eliminate this dilemma by ensuring that losses would only be recoverable if premiums for earthquake coverage had been collected.\[16\]

The suitability of insurance as a risk distribution and loss allocation mechanism is clearly demonstrated by comparing casualty insurance to other sources of disaster relief, such as federal disaster relief loans. It should be noted that federal disaster relief loans are just that—loans for which the borrower must qualify. Moreover,

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6.5: (31.5 x 31.5 = 992.25) P. YANEV, PEACE OF MIND IN EARTHQUAKE COUNTY 38-42 (1980).

12. See supra note 9.

13. See supra note 8.

14. L.A. Daily J., August 18, 1983, at 2, col. 2. As a result, insurance companies paid approximately $13,000,000 in earthquake losses. By comparison, according to one study, total California earthquake losses paid between 1916 and 1981 came to only $13,997,540. Between 1962 and 1981, earthquake premiums earned amounted to $277,787,896, compared to losses paid of $9,270,558, for a payout ratio of 3.34%. K. STEINBRUGGE, supra note 9, at 190 (Steinbrugge cautions, however, that these figures are often incomplete, inaccurate, and inconsistent). Although earthquake premiums earned in 1982 reached a record $58,877,000 (with negligible losses paid in that year), the most recent estimates of probable maximum insured loss were $3.94 billion for the San Francisco Bay area (Zone A), and $5.48 billion for the Los Angeles-Orange County area (Zone B). Telephone interview with Richard Roth, California Department of Insurance, Los Angeles office (Mar. 1, 1984). These figures were published in the February, 1984 edition of the CEZ/PMLE Program Report, supra note 9; see infra note 125 and accompanying text for an explanation of earthquake PML zones.

15. CEZ/PMLE Program Report (1984), supra note 9, notes that the capacity of the insurance industry for an earthquake catastrophe is a "matter of opinion." According to the Report, in 1982 the insurance industry took in $118 billion in premiums and investment income, and paid out $113 billion in losses, expenses, and policyholder dividends. At year end 1982, the industry had a surplus of $60 billion. Id. at 24.

16. See infra note 102 and accompanying text.
they are available only in limited amounts, and must be repaid at specific rates of interest which are based on the ability to pay.\textsuperscript{17} Although the loan limits have been raised and the interest rates have been lowered since Coalinga, the percentage of applicants who actually qualify for such loans continues to be extremely low.\textsuperscript{18} Depending on the circumstances, casualty insurance may be the only source of recovery funds available to many homeowners and tenants.

Therefore, it is clearly in the public interest to provide the insurance companies with some protection against insolvency which is brought on by indiscriminate application of the concurrent cause doctrine. At the same time, however, it is necessary to take steps to distribute the risk of disaster losses so that the burden is shared equally.

B. The All-Risk Homeowner's Policy

In order to better comprehend the impact of the new provisions of the insurance code on present casualty insurance practices, the reader should have a basic understanding of all-risk policies and their application to disasters such as earthquakes.

Generally, homeowners are insured under an "all-risk" policy\textsuperscript{19} that covers all risks from physical loss, subject to certain exceptions

\textsuperscript{17} Federal disaster relief loans are administered by the Federal Emergency Management Agency (FEMA) and the Small Business Administration (SBA). Eligibility is based on ability to pay, as determined by the SBA. There are three categories of disaster loans: physical damage to homes, physical damage to businesses, and business economic loss (where the physical business itself is not damaged, but the disaster halts sales and other business activity). In the home and business categories, two types of interest rates are charged, depending on whether or not the applicant could qualify for a loan elsewhere (as determined by the SBA). If an applicant can demonstrate financial need, he or she may qualify for a grant. Even if an applicant qualifies for a loan or a grant, there are limits on the amounts. A homeowner may borrow up to a total of $55,000 for real and personal property; grants are limited to $5,000, and are only available if a disaster is officially declared. In addition, only a small percentage of applicants qualify for these loans. For example, in Coalinga, only 13% of the homeowners who were initially interviewed received loans, and the interest rates ranged from 5% to 11\%\textperthousand, depending on eligibility for other loans. Telephone interview with Small Business Administration, Sacramento office (Feb. 2, 1984).

\textsuperscript{18} According to the Small Business Administration, homeowners may obtain personal property loans up to $20,000 and real property loans up to $100,000. If the SBA determines that the homeowner would qualify elsewhere for a non-government loan, the interest rate is 8%. Otherwise, the rate is 4%. Loan maturity is based on ability to repay, but may not exceed 30 years. According to an SBA Disaster Activity Report, out of 355 interviews conducted pursuant to the April 24, 1984 Morgan Hill earthquake, only 26 applications were accepted for processing. Out of these, only two were approved. Letter and accompanying information provided by Small Business Administration, Sacramento office (May 16, 1984) (copy on file at the University of Santa Clara Law Review office).

\textsuperscript{19} See supra note 7.
or exclusions. All-risk policies are distinguishable from the less common "specified peril" policies, which only cover the policy holder for certain perils specified in the policy. The advantage of the all-risk policy to the insured is that there are fewer gaps in the coverage and, perhaps more significantly, the burden of proof is on the insurer to prove that a particular loss was not covered by the policy.20

Consequently, insurers insert exclusionary clauses in the standard all-risk policy in order to exclude coverage for losses due to certain events or perils (e.g., earthquakes, mudslides, floods, etc.). The insurer can then offer additional coverage for these perils by means of endorsements or riders attached to the standard policy.21 This permits the homeowner the option of purchasing additional coverage, and theoretically results in a correlation between the degree of risk insured and the amount of premiums collected.

There are a number of drawbacks to this approach of providing an all-risk policy which purports to cover everything not otherwise excluded, then adding coverage for specific perils through riders or endorsements. First of all, the policy itself becomes difficult to understand. Policyholders are generally unaware of the specifics of their actual coverage until after a disaster strikes. Second, as indicated by the low percentage of homeowners who carry earthquake insurance, providing optional coverage creates a situation in which the homeowner must speculate, based on inadequate or inaccurate information, on the probabilities of loss and the necessity for such coverage. Despite the fact that earthquakes are known to have occurred for thousands of years, the California Department of Insurance only began to publish statistical probabilities of loss in 1981.22 Therefore,

20. Strubble v. United Services Automobile Ass'n, 35 Cal. App. 3d 498, 110 Cal. Rptr. 828 (1973) (holding that insurer had burden of showing that loss to insureds was proximately caused by the excluded peril of earth movement other than earthquake, an included peril).

21. Earthquake insurance is typically written as an endorsement to the standard comprehensive homeowner’s policy, and is subject to a deductible that ranges from 5-15%, depending on the type of home construction. Rates are calculated on the aggregate probable maximum loss (PML), which is based on, among other factors, the location of the structure and its proximity to a known or suspected earthquake fault zone, the type of building, and costs of repair and replacement. A typical premium for a $100,000 home in the Santa Clara Valley would be approximately $165-200 per year, with a $5,000 deductible. For an excellent and thorough discussion of rates, deductibles and PML calculations, see K. Steinbrugge, supra note 9, chs. 8 & 9. See also SCEPP, supra note 2, at 3-6.

22. The Alquist-Priolo Special Studies Zone Act of 1972, Cal. Pub. Res. Code § 2622 (West 1972 & Supp. 1984), requires the State Geologist to establish Special Studies Zones to encompass all “potentially and recently active” traces of the San Andreas, Calaveras, Hayward, and San Jacinto faults. Faults were defined as active if they showed evidence of surface displacement during Holocene time (about the last 11,000 years). Faults were defined as potentially active if there is evidence of surface displacement during Quaternary time (last 2 to 3
the average homeowner cannot be expected to make an informed and well-reasoned decision whether or not to purchase such coverage. As a result, those who are the poorest risks are the most likely to apply for coverage, thereby limiting the extent to which the risk of loss can be distributed. This result is known as "adverse selection."\(^2\)

Complicating this approach is the fact that the mere existence of an exclusionary clause does not necessarily preclude recovery. Whether or not a policyholder recovers may depend on whether the exclusionary clause is interpreted narrowly or broadly by the court. A narrow interpretation of a boilerplate exclusionary clause that is reproduced in thousands of policies could expose an insurer to unexpected losses in significant quantities, which would result in insolvency if adequate financial resources are not available.\(^2\) On the other hand, if the clause is construed broadly to limit coverage, the insured could possibly be left with a major loss and no adequate source of recovery. The issue thus becomes one of interpretation.

III. INSURANCE POLICY INTERPRETATION

Insurance policy interpretation involves two potentially conflicting theories of contract analysis. The traditional theory\(^2\) holds that an insurance policy is a standard contract, and therefore when its terms are plain and unambiguous it is the duty of the court to hold the parties to the contract.\(^2\) The alternate theory is based on the concept that insurance contracts are distinguishable from standard contracts, and thus application of classical theories of interpretation will lead to unconscionable results.\(^2\)

Proponents of the latter theory rely on concepts such as *contra proferentem*,\(^2\) reasonable expectation,\(^2\) unconscionability,\(^2\) and

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23. See SCEPP, supra note 2, at 26. Studies have shown that earthquake insurance policy sales increase after a single earthquake, then drop when the perceived danger has passed. Id. at 4-5.
28. Holmes, supra note 25, at 789 n.25 (1978) (defining *contra proferentem* as a "succinct expression of the familiar principle that courts will strictly construe insurance policies
This approach finds support in the modern view that insurance contracts are considered "contracts of adhesion," and should be treated differently than other contracts.\(^3\)

A. Scope of Liability Depends on Interpretation of the Exclusionary Clause

The determination of an insurer's liability for a claim is a complex issue involving questions of both fact and law. Whether a particular event was the proximate cause of the insured's loss is generally a question of fact to be determined by the jury. When the proximate cause has been determined or the facts are not in dispute, the issue becomes a matter of interpreting the policy itself. The correct construction of a contract provision, such as an exclusionary

against the insurer and resolve all ambiguities and doubts in the insured's favor.


30. See generally J. Calamari & J. Perillo, supra note 27, at 318-28; Holmes, supra note 25, at 796. See also Restatement (Second) of Contracts § 208 (1979), which states:

If a contract or term thereof is unconscionable at the time the contract is made a court may refuse to enforce the contract, or may enforce the remainder of the contract without the unconscionable term, or may so limit the application of any unconscionable term as to avoid any unconscionable result.

Id.

31. Restatement (Second) of Contracts § 207 (1979), states that "[i]n choosing among the reasonable meaning of a promise or agreement or a term thereof, a meaning that serves the public interest is generally preferred." (formerly § 236(f)). (J. Calamari & J. Perillo, supra note 27, at 122 n.40, suggest that both Corbin and Williston are in accord as to this and other rules of contract interpretation).

32. See, e.g., Neal v. State Farm Ins. Co., 188 Cal. App. 2d 690, 694, 10 Cal. Rptr. 781, 784 (1961) (stating that a contract of adhesion is a standardized contract, imposed and drafted by a party in a superior bargaining position, allowing the subscribing party only the opportunity to adhere to the contract or reject it); see generally J. Calamari & J. Perillo, supra note 27, at 336-47, (discussing the treatment of contracts of adhesion within the context of the duty to read).


34. See, e.g., Fireman's Fund Ins. Co. v. Videfreeze Corp., 540 F.2d 1171, 1179-80 (3rd Cir. 1976) (whether testimony of insured's experts provided evidence from which jurors could find that earthquake had occurred, creating jury question as to cause of rock slide); Gullett v. St. Paul Fire and Marine Ins. Co., 446 F.2d 1100 (7th Cir. 1971) (evidence raised jury question as to whether damage to building was caused by falling objects or collapse of building, or by landslide or other earth movement, in determining whether loss was covered).
clause, is a question of law subject to de novo review. 35

Consequently, the interpretation of the exclusionary clauses in an insurance contract entails consideration of a number of factors including: the form of the contract itself,36 the express language in the clauses, the factual circumstances giving rise to the claim, and the compatibility of the result with notions of fairness and public policy.37

An insurer may effectively limit coverage to the extent allowed by law and public policy.38 Some courts have held that when such limits are set forth in plain, clear and unmistakable language, the limits should be respected.39 However, the history of insurance policy interpretation indicates that statutory provisions and standardized policies were necessary to provide policyholders with some measure of protection against unscrupulous insurers.40


36. CAL. INS. CODE § 2070 (West 1972 & Supp. 1984) provides, in pertinent part, that
All fire policies . . . shall be on the standard form, and, except as provided by this article, shall not contain additions hereto. No part of the standard form shall be omitted therefrom except that any policy providing coverage against the peril of fire . . . need not comply with the provisions of the standard form. . . . provided that coverage . . . when viewed in its entirety, is substantially equivalent to or more favorable to the insured than that contained in such standard form fire insurance policy.

Id. Therefore, an insurance company may provide a modified version of the standard fire insurance form, but only if it is "substantially equivalent to or more favorable to the insured" than the standard policy. Id.

37. See J. CALAMARI & J. PERILLO, supra note 27, at 336-37 (noting that there is a growing body of case law supporting the theory that even if there was assent, a term could be excised from a contract because it contravenes public policy or is unconscionable).


40. S. Weinstock & J. Maloney, History and Development of Insurance Law in California, CAL. INS. CODE, Vol. 1, XXXVII-XCV, (West 1972). The complications surrounding the settlement of claims following the San Francisco earthquake and fire of 1906 were directly responsible for the enactment of a standard form fire policy in 1909. Id. at LXIII, (noting that irresponsibility on the part of unscrupulous insurers in the early days of the insurance business had led to earlier enactments of standard fire policy laws in Massachusetts in 1873 and in New York in 1886) Id. at LXXII-LXIV.
B. Exclusionary Clause Language Must Be Conspicuous, Plain and Clear

The requirement that language used to limit coverage be “conspicuous, plain and clear” evolved from early statutory contract provisions, many of which are still in effect. In a recent opinion, Reserve Ins Co. v. Pisciotta, the California Supreme Court cited an 1872 provision, Civil Code section 1638, which states that “[t]he language of a contract is to govern its interpretation, if the language is clear and explicit, and does not involve an absurdity.” Moreover, clauses imposing specified duties and obligations on the insured, and limiting the liability of the insurer, must conform to the “plainly printed” requirements set forth in section 2073.

In addition to requiring that exclusionary clauses must be conspicuous, plain and clear, courts have also held that exclusionary clauses are subject to a different rule of construction than that applied to coverage clauses. Whereas coverage clauses are to be interpreted broadly so as to afford the greatest possible protection to the insured, exclusionary clauses are to be interpreted narrowly against the insurer. Although this principle is simply stated, it’s application is complicated by the doctrine of reasonable expectation.

C. Resolving Ambiguities: The Reasonable Expectation Doctrine and the Burden of Proof

To determine whether the terms of an exclusionary clause are plain and clear or ambiguous, the courts generally interpret the policy in light of the plain meaning that a layman would attach to the words used. Referring to Civil Code section 1638, the Pisciotta

41. See e.g., Hurd v. Republic Ins. Co., 113 Cal. App. 3d 250, 254, 169 Cal. Rptr. 675, 678 (1980) (holding that notice of limited coverage for household and personal property was not conspicuous, plain and clear, and that insureds could have reasonably expected that contents of building were insured to limits of policy).
42. 30 Cal. 3d 800, 807, 640 P.2d 764, 767-68, 180 Cal. Rptr. 631-32 (1982).
43. 30 Cal. 3d at 807, 640 P.2d at 767-68, 180 Cal. Rptr. at 631-32.
47. Pisciotta, 30 Cal. 3d at 807, 640 P.2d at 767, 180 Cal. Rptr. at 631. Courts have emphasized that it is the layman’s interpretation that is the standard, not the attorney’s or insurance expert’s analysis. See, e.g., Sabella v. Wisler, 59 Cal. 2d 21, 30-31, 377 P.2d 889,
court declared that courts "will not adopt a strained or absurd interpretation in order to create an ambiguity where none exists." However, ambiguities or uncertainties, if found, are resolved against the insurer so as to "fairly achieve [the] object of providing indemnity for the loss to which the insurance relates." According to the Pisciotta court, the purpose of this canon of construction is to protect the insured's reasonable expectation of coverage in situations involving a contract of adhesion.

The principle of "reasonable expectation" provides an objective standard to determine the effect of the exclusionary clause. While basing the standard on the reasonable expectation of the layman may possibly provide the sophisticated policyholder with an advantage in a policy interpretation dispute, such as an objective standard arguably produces greater certainty and predictability concerning legal rights. Consequently, the reasonable expectation doctrine, despite its apparent flaws, may possibly be a better theory than simply resolving ambiguities against the insurer. One court recently held that the doctrine of reasonable expectation is only applicable when there is an ambiguity in the policy, and another court refused to allow recovery where the policy contained clear and explicit terms, but the insured did not disclose what he believed the policy meant. The courts have consistently applied the layman's standard of reasonable expectation, even in cases where it would appear that a higher standard might be appropriate, such as where the policyholder was a

894-95, 27 Cal. Rptr. 689, 694-95 (1963); City of Mill Valley v. Transamerica Ins. Co., 98 Cal. App. 3d 595, 602, 159 Cal. Rptr. 635, 639 (1979); Crane v. State Farm Fire & Cas. Co., 5 Cal. 3d 112, 115, 485 P.2d 1129, 1130, 95 Cal. Rptr. 513, 514 (1971). Furthermore, recovery is sometimes granted even if the insured is aware of the restrictive terms of the policy, if enforcement of the policy provision would defeat the reasonable expectations of a great majority of policy holders to whose claims it is relevant. R. Keeton, supra note 7, at 358.

48. Pisciotta, 30 Cal. 3d at 807, 640 P.2d at 767-68, 180 Cal. Rptr. at 631-32. However, Professor Keeton notes that "the conclusion is inescapable that courts have sometimes invented ambiguity where none existed . . . resolving the invented ambiguity contrary to the plainly expressed terms of the contract document." R. Keeton, supra note 7, at 356.

49. Pisciotta, 30 Cal. 3d at 807-08, 640 P.2d at 768, 180 Cal. Rptr. at 632 (citing Harris v. Glens Falls Ins. Co., 6 Cal. 3d 699, 701, 493 P.2d 861, 862, 100 Cal Rptr. 133, 134 (1972)).

50. Pisciotta, 30 Cal. 3d at 808, 640 P.2d at 768, 180 Cal. Rptr. at 632.

51. R. Keeton, supra note 7, at 351.

52. Id. at 351-56.


D. Development of the Concurrent Proximate Cause Doctrine

Even if the exclusionary clause is written in terms that are conspicuous, plain and clear, and the court finds that a reasonable layman would not have interpreted the exclusionary terms otherwise, the insurance company must still meet a heavy burden of proof in order to show that the insured's loss was not proximately caused by an insured peril. The problem arises when the loss results from a combination of different events, comprising both insured and excluded perils. The insurer must still show that none of the several possible causes of the loss are covered under the 'all-risk' policy. The matter is complicated in order to determine whether any of the several possible causes is the "proximate," "immediate," "efficient," or only a "remote" cause of loss.

In 1963, the California Supreme Court, in Sabella v. Wisler, held that if an insured peril was at least partially the cause of the resulting loss, the insured would be entitled to recover. In Sabella, the court ruled in favor of an insured whose house had been damaged when a ruptured sewer line allowed waste water to be emptied onto loose fill under the house, resulting in subsidence of the earth. Although the court found that the exclusionary clause, excepting coverage for "loss . . . by . . . settling" appeared sufficiently understandable to an ordinary reader, the court relied instead on the theory that when there is a concurrence of causes, the efficient cause is the one to which the loss is to be attributed.

55. In Garvey, supra note 8, the plaintiff-homeowner was a professor of law at the Univ. of San Francisco, a point noted by the appellant in his opening brief (AOB 3). In General Ins. Co. of America v. City of Belvedere, 582 F. Supp. 88 (1984), a federal district court applied the reasonable expectation standard in holding that an exclusionary clause did not operate to limit coverage for losses arising out of a judgment for inverse condemnation against a municipality.


57. CAL. INS. CODE § 530 (West 1972), states:

An insurer is liable for a loss of which a peril insured against was the proximate cause, although a peril not contemplated by the contract may have been a remote cause of the loss; but he is not liable for a loss of which the peril insured against was only a remote cause.

58. 59 Cal. 2d 21, 377 P.2d 889, 27 Cal. Rptr. 689 (1963) (action for damages to home as result of subsidence of earth despite fact that policy excluded coverage for physical damage due to "settling" upheld).

59. Id.

60. Id.

61. Id. at 31-32. The court found that the breaking of the sewer pipe and subsequent
In 1973, in *State Farm v. Partridge*, the California Supreme Court upheld the trial court's finding that when two separate, distinct and different acts both proximately and concurrently contribute to the plaintiff's injuries, the plaintiff can recover under both an automobile policy and a homeowner's policy. In *Partridge*, the injury resulted when the policyholder drove his four-wheel drive vehicle off the road in pursuit of a rabbit and a pistol that he had modified discharged as the vehicle hit a bump. The court allowed recovery under the homeowner policy despite a clause excluding coverage for "bodily injury . . . arising out of the . . . use of . . . any motor vehicle . . . ." The court declined to predicate the insurer's liability upon the ambiguity of the exclusionary clause. Instead, it expressly declared that when an insured risk and an excluded risk constitute concurrent proximate causes of the accident, the insurer is liable so long as one of the causes is covered by the policy.

### E. Application of the Concurrent Cause Doctrine to Exclusionary Clauses in Natural Disasters

*Safeco Insurance Co. of America v. Guyton* involved flood...
damage that resulted when heavy rains accompanying Hurricane Kathleen broke through flood control facilities and inundated parts of the City of Palm Desert, California. The policyholders contended that their losses were proximately caused by the water district's negligence in maintaining the flood control facilities, and therefore their losses were covered as damages resulting from third-party negligence. The Ninth Circuit Court of Appeals held that the concurrent cause doctrine set forth in *Partridge*, although not addressed by the *Safeco* district court, was dispositive in the policyholder's favor.

This doctrine was similarly applied in *Premier Insurance Co. v. Welch*, which involved a house that had slid off its foundation and overturned into a ravine. The parties had stipulated that the slide would not have occurred if a drain, designed to release subsurface waters, had not been damaged. The damage to the subdrain was not the result of natural causes, but most likely was caused by the original sewer contractor. Citing *Sabella* and *Partridge*, the *Welch* court stated that the insurer's liability under the policy depended on whether the efficient cause of the loss (the cause that set others in motion) was a covered peril. The court held that the heavy rains, although a significant contributing factor, "failed to comprise a superseding cause breaking the chain of causation and being able to produce the loss independently of the damaged

FLOOD, SURFACE WATER . . . OVERFLOW OF STREAMS OR OTHER BODIES OF WATER . . . ALL WHETHER DRIVEN BY WIND OR NOT . . . . Id. at 552-53 (emphasis in original).

67. The district court had refused to allow expert testimony to substantiate the policyholder's contention that similar policies had been interpreted to cover such losses, and held instead that the language in the policy was clear. Id. at 553. Since the court of appeals found that the losses were covered if third-party negligence was established, it did not reach the question whether the refusal to allow expert testimony was in error. Id. at 557.

71. The homeowner's policy provided coverage for "all risks of physical loss" except losses "CAUSED BY, RESULTING FROM, CONTRIBUTED TO OR AGGRAVATED BY . . . (C) WATER BELOW THE SURFACE OR THE GROUND INCLUDING THAT WHICH EXERTS PRESSURE ON OR FLOWS, SEEPS OR LEAKS THROUGH . . . FOUNDATIONS . . . ." 140 Cal. App. 3d at 724, 189 Cal. Rptr. at 658-59 (emphasis in original).
72. 59 Cal. 2d 21, 377 P.2d 889, 27 Cal. Rptr. 689 (1963) (physical damage to house due to settling caused by broken pipe).
74. 140 Cal. App. 3d at 725, 189 Cal. Rptr. at 660. The court noted that here the causal sequence began with the negligent installation of the sewer line in 1972, and that the heavy rainfall was the first link in the causal sequence.
IV. PROPOSALS

Legislative attempts to resolve risk distribution and loss allocation problems are subject to all of the inherent difficulties of the legislative process, most notably those involving issues of public policy, fairness, and interpretation, not to mention political lobbying efforts of special interest groups. Specifically, legislative attempts to precisely delineate coverage limits are complicated by the difficulties involved in calculating probabilities of natural events such as earthquakes. Earthquakes are unpredictable as to their intensity, their location, and their frequency. Nevertheless, the severity of their destructive force and their pervasive impact on society generally makes it essential to address the issue of how best to distribute the risk.

In addition to various legislative proposals and enactments, numerous other strategies and programs have been proposed. To the extent that each proposal attempts to address a particular aspect of the problem, it deserves full consideration. However, just as there is no one perfect solution to the entire problem, most of the proposals are deficient in one or more aspects. A comprehensive review of all of these proposals is beyond the scope of this comment, but a brief discussion of a few will serve to provide the reader with an appreciation for some of the factors involved in determining an appropriate solution.

This section will briefly review some of the strategies discussed in the comprehensive Southern California Earthquake Preparedness Report (SCEPP). In addition, this section will highlight certain aspects of the new provisions of the California Insurance Code which attempt to address some of the problems discussed previously, and will point out areas of potential conflict with existing conditions.

A. SCEPP Strategies and Proposals

The SCEPP report discusses three strategies based on the premise that the federal government should serve as the focal point of a solution to the earthquake insurance issue. The first strategy in-
volves redirecting federal disaster relief programs toward more effective preparedness and hazard mitigation. The second strategy proposes establishing a program similar to the National Flood Insurance Program. The third strategy proposes a combined program, involving expanding insurance coverage with government reinsurance programs, and modifications of the present tax restrictions.

The report points out that while there is considerable support for the federal government to increase its traditional role of providing disaster relief in the form of emergency service and loans, there is little enthusiasm for direct federal intervention in the earthquake insurance market. According to SCEPP, the government's functions should be to "stimulate and support improved use and enforcement of earthquake loss-mitigation measures." This would involve the development of programs designed to encourage greater efforts at the state and local levels to improve disaster preparedness and to develop and to enforce tougher building safety standards.

The National Flood Insurance Program (NFIP) has been recommended as a model for the development of a similar program for earthquakes. The NFIP was established because the federal response to flood disasters was unsatisfactory, and because it neither reduced losses nor discouraged flood plain management. Under the NFIP, proper land use and flood plain mismanagement are accomplished through incentives and enforced under the threat of withdrawal of the subsidies if standards are not met.

The idea of improving local efforts at disaster preparedness and hazard mitigation is a subject of growing interest. See, e.g., Scott, California Cities and Seismic Safety, WESTERN CITY, August 1983, at 6-16, and Siegel, Reducing the Risk, WESTERN CITY, August 1983, at 12-13. Both articles provide suggestions and general discussion on actions that municipalities can take to reduce the effects of a devastating earthquake.


Typical federal responses to flood disasters included the construction of flood control works such as levees and seawalls.

One such incentive offered was federally subsidized flood insurance in communities with approved programs.
The SCEPP report suggests that such a program would encounter strong opposition from the insurance industry, due partially to the resentment against federal incursion into the "free market" system, and partially to fears that the federal government would eventually take over such a national program entirely because of its sheer complexity. Furthermore, there is probably little support in the Congress or in the Executive branch for expanding the government's role into an area presently controlled by private industry.

The third strategy proposed by the SCEPP report, involves a combination of programs. First, the federal government would continue to provide emergency assistance and relief loans. Second, the government would act as a reinsurer in order to allow insurance companies to expand their coverage and to increase the allocation of the loss. Theoretically, if insurance companies could be assured of government support in allocating the loss, they could afford to offer broader coverage, and thus could distribute the risk more widely. Third, the federal government would modify its tax policies, which presently tend to restrict the buildup of catastrophe reserves. Federal reinsurance and modification of IRS policies would allow the insurance companies to increase contingency reserves, without the restrictions concurrently imposed by increased tax liabilities.

While this third strategy contains elements essential to a successful program, namely government supported reinsurance and revisions of certain tax provisions, it is inadequate in at least two important aspects. First it does not provide the insurance industry with incentives to develop policies which are designed to promote appropriate damage mitigation measures. Allowing the insurance companies to retain larger reserves without tax penalties will help prevent industry insolvency, but will do nothing to reduce the potential demand on these reserves. Second, this strategy does not address the possible role of government, either alone or in cooperation with the private industry, in conducting research and development of appropriate construction techniques.

88. Id. at 39. It is conceivable that such a program would eventually include coverage for losses due to other natural disasters, such as tornadoes, hurricanes, etc.
89. Id. at 39-40.
90. Id. at 40.
91. Id. at 41. CAL. INS. CODE § 3080 (West 1972), requires insurance companies to reinsure if liabilities for a single event (e.g., earthquake) exceed 10% of their net assets.
92. Id.
93. Id.
94. SCEPP, supra note 2, at 26-27. Tax restrictions were cited in the SCEPP report as being a major concern among insurers.
B. Legislative Approaches

The approach set forth in the recently enacted legislation attempts to address two primary concerns. First, the statute addresses the problem of insurance availability and the related problem of low participation. Second, the statute expressly addresses the concurrent cause issue. For the reasons discussed below, however, the legislation misses the mark as to the first concern, and fails to adequately address the second.

The statute contains two statements of legislative intent, the first of which is to "promote awareness of earthquake insurance . . . by requiring insurers to offer that coverage." This objective appears to address the problems of a "soft" market where, despite the availability of affordable rates, only five percent of California homeowners carry earthquake insurance. The SCEPP report summarizes this problem as follows: "insurance providers are reluctant to aggressively market earthquake insurance, and potential insurers are unaware of, [and/or] misinformed about, earthquake insurance." Due to the problem of adverse selection and the short, thirty-day acceptance period, it seems unlikely that a significant number of residential property owners, who have not purchased earthquake coverage, will now take advantage of the mandated offer. The statute expressly provides that if the offer is not accepted within the thirty-day limit, there shall be a conclusive presumption that the named insured has elected not to accept the coverage. Further, if the offer is not accepted the insurer shall not be required to offer earthquake coverage again to the named insured. Moreover, the election not to accept is binding upon any other person insured or any other party having an insurable interest in the insured property. The decision whether or not to make the coverage available at another time is wholly within the insurer's discretion.

A named insured who does not accept the offer within the thirty-day time limit, for any reason, might find that he or she is foreclosed from recovery under the existing policy, and is possibly prohibited from purchasing additional coverage under the statute's conclusive presumption provision. The homeowner who is denied re-

95. CAL. INS. CODE (Stats. 1984, Ch. 916, p. 46, Sec. 2).
96. SCEPP, supra note 2, at 16.
97. Id.
98. See supra note 23.
100. CAL. INS. CODE § 10086 (West Supp. 1985).
covery might argue that he had not received the offer in sufficient time to conduct a reasonable evaluation of the company's offer with regard to his assessment of the risks involved. Realistically, thirty days is an unreasonably short period of time to make an intelligent decision given the complexity of various insurance policies. A "conclusive presumption" of nonelection of coverage imposes an undue hardship on the homeowner.

The court may, on the other hand, conclude that the hardship imposed by the restrictive provisions, when construed in light of the statutory intent to "promote awareness," would be more equitably interpreted as imposing a rebuttable presumption of noncoverage.

The legislation expressly provides that:

It is the intent of the Legislature to make clear that loss caused by or resulting from an earthquake shall be compensable by insurance coverage only when earthquake protection is provided through a policy provision or endorsement designed specifically to indemnify against the risk of earthquake loss, and not through policies where the peril of earthquake is specifically excluded even though another cause of loss acts together with an earthquake to produce the loss.\(^{102}\)

This passage should be read in conjunction with the provision stating that a policy which does not cover the peril of earthquake shall not be held to provide coverage for "any loss or damage when earthquake is a proximate cause regardless of whether the loss . . . results from, or is contributed to, . . . by any other proximate or remote cause, whether or not covered by the policy."\(^{103}\) Simply stated, these provisions declare that if the policyholder does not accept the offer and purchase earthquake coverage, the concurrent causation doctrine shall not be applied even if an insured peril is a contributing, proximate cause of the damage.

Although the intent is clear, the results are not. The issue in each case would be whether or not the damage was proximately caused by an earthquake. Resolution of this question will very likely require expert testimony to establish or disprove earthquake as a proximate cause. One study showed that in 1975, seismograph stations recorded 2858 earthquakes in the greater San Francisco Bay area that year, or more than seven per day.\(^{104}\) If a homeowner without earthquake coverage happens to discover indications of structural

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104. K. Steinbrugge, *supra* note 9, at 19.
damage one day while working in the yard, and it turns out that the damage is due to negligence on the part of the contractor, the question will be whether the insurance company would be able to deny recovery on the grounds that it is more likely than not that the damage was proximately caused by one or more low magnitude tremors.

The language of the statute indicates that if a covered peril and an earthquake are both proximate causes of the damage, and the policy does not contain earthquake coverage, no recovery will be granted for the loss. One resulting problem will be tracing and limiting the chain of causation. For example, if a slight earthquake causes a lit candle to tip over, and sets a fire that destroys the house, and the policy did not cover earthquakes, the language of the statute indicates that the fire coverage under the all-risk policy would not be effective. What if a neighbor, also without earthquake coverage, suffered extensive smoke and water damage? Again, the language indicates that no recovery would be granted.

Another situation in which the effect of the statute is unclear, is when the homeowner has purchased earthquake coverage, but his or her policy contains an exclusion for damage caused by, contributed to, or aggravated by water seepage. If an earthquake causes an underground water main or sewer line to break, and the resulting water seepage causes damage, would the exclusionary clause operate to limit the coverage provided under the earthquake coverage? If so, it would seem pointless to purchase earthquake coverage. On the other hand, if the court permitted coverage on the ground that the intent of the statute was to preclude application of the concurrent cause doctrine only when earthquake coverage was not purchased, it would frustrate the purpose of the exclusionary clause.

In any event, the questions will remain unanswered until the courts have an opportunity to review the new provisions of the statute. Meanwhile, both homeowners and insurance companies will continue to suffer from the effects of the ensuing uncertainty. It is doubtful that insurance companies can reasonably rely on the new code provisions in light of past judicial interpretations of insurance policies, yet they must still determine appropriate premium rates. Consequently, homeowners will undoubtedly be confronted with a wide array of policy options with varying rates and terms.

Meanwhile, the underlying problems of uncertainty and insolvency remain unabated by the new statute. Accordingly, if these problems are to be resolved, the legislature should go one step fur-
ther if the needs of homeowners and insurance companies are to be adequately protected. An alternative approach, involving a compulsory earthquake insurance program, would offer several opportunities for providing such protection.

V. AN ALTERNATIVE APPROACH: COMPULSORY EARTHQUAKE INSURANCE

This portion of the comment will discuss an alternative approach to the problem of earthquake risk distribution that is based on the no-fault basic protection plan proposed for the automobile insurance industry. Specifically, it will focus on a proposal that utilizes the potential risk distribution capabilities of the insurance industry, avoids the complexities inherent in determining causation, and provides for a more equitable distribution of the risk.

Instead of making it mandatory for the insurance industry to offer earthquake coverage, this proposal suggests that the better approach is to make it mandatory for property owners to purchase earthquake insurance. By making the purchase of earthquake coverage compulsory, problems created by adverse selection, complex causation issues, and related difficulties are reduced or eliminated. Making earthquake coverage an integral part of every property owner's insurance program may promote greater public interest in disaster preparedness and recovery programs, and encourage greater participation by engineers, geologists, marketing specialists and local governments in the search for a solution.

A. Automobile Claim Compensation—A Social Problem

An appropriate and useful model for the compulsory earthquake insurance proposal is the no-fault, basic protection plan developed by Professors Robert E. Keeton and Jeffrey O'Connell in the 1960s. Their studies of problems associated with compensating victims of automobile accidents revealed that some injured persons received no compensation at all while others received far less than their economic loss. They attributed this gap in part to the role fault played in the system—in order to recover, the injured had to

106. See infra note 109 and accompanying text.
107. Professor of Law, Harvard University.
108. Professor of Law, University of Illinois.
110. Id.
assert both that another was at fault and that he himself was blameless. Further, the system was slow, cumbersome, and costly to administer, and consumed vast quantities of time and resources without providing the indemnity it was designed to provide. In addition to the toll of physical injury, the study found that the temptations to exaggerate claims or otherwise seek maximum recovery further increased the costs in terms of psychological and moral injury. In short, Professors Keeton and O'Connell felt that the (then) present automobile claims system "provides too little, too late, unfairly allocated, at wasteful cost, and through means that promote dishonesty and disrespect for the law.”

The problem as Professors Keeton and O'Connell saw it, became a social problem. Unlike the victim in an isolated accident, the automobile accident victim became a social problem, "both because of his number and because of the source of his injury.” According to Professors Keeton and O'Connell, the organized groups most concerned with the problem, insurance companies and trial lawyers, had special interests somewhat at odds with policyholders and the public in general.

Due to the maladjusted allocation of compensation, and the rising costs caused by inefficient administration of the system, the overall costs were disproportionate to the benefits gained. Consequently, the portion of premiums collected that was used to compensate victims was inadequately low. The plan proposed by Professors Keeton and O'Connell called

111. Id. at 1. (Of course, this was modified in those states that have adopted contributory negligence).
112. Id. at 1-2.
113. Id. at 3.
114. Id.
115. Professors Keeton and O'Connell used the example of a person slipping and injuring himself in a bath tub at home. Id. at 3-4.
117. Id. See also Holmes, Interpreting an Insurance Policy in Georgia: The Problem of the Evidentiary Condition, 12 GA. L. REV. 783, 788 (1978) (citing the need to protect the reasonable expectations of the "four competing interests—the insured, insurance company, other policyholders, and the general public" as justification for control over policy terms).
118. R. KEETON & J. O'CONNELL, supra note 109, at 69-70.
119. Id. at 71. Professors Keeton and O'Connell note that "less than half of the automobile tort liability insurance premium dollar ever reaches the pocket of any victim as compensation for his injury.” Id. at n.190. By contrast, recall that during a 20-year period in California (1962-1981), earthquake losses paid amounted to only 3.34% of premiums earned. See supra note 14.
for compulsory automobile insurance under which the victim could claim "basic protection benefits" up to certain specified limits.\textsuperscript{120} The Keeton-O'Connell approach was essentially a basic protection plan that shifted from a conventional third-party setting to first-party setting.\textsuperscript{121} By providing immediate compensation for economic loss and medical costs in the event of an earthquake, a similar plan would significantly reduce the degree of uncertainty involved in the recovery process following a natural disaster.

B. Application of the Compulsory, No-Fault Plan to Earthquake Insurance: Some Unique Advantages

Application of the compulsory, no-fault plan to earthquake insurance offers several advantages. The compulsory approach appears uniquely suited to some of the more salient problems involved with earthquake insurance, such as adverse selection and issues of proximate cause. The problems associated with inefficient allocation of compensation, cost of administration, waste and fraud which are addressed by the no-fault plan are similar to the problems involved in earthquake insurance.

In addition, many problems involved with automobile insurance claims would not be significant factors in earthquake insurance settlements, such as determining percentages of comparative negligence, and compensating victims for pain and suffering caused by recklessness.\textsuperscript{122} Moreover, by largely eliminating the need to determine relative degrees of proximate cause and to litigate various doctrines of policy interpretation, application of the plan should reduce the degree of uncertainty that presently exists.

A compulsory earthquake insurance plan that provides coverage based on the \textit{results} rather than the \textit{cause} of the loss would not re-

\textsuperscript{120} See R. Keeton \& J. O'Connell, \textit{supra} note 109, chs. 6 and 7.

\textsuperscript{121} The plan extended the medical payments provision to cover out-of-pocket losses and wage losses up to a maximum of $10,000. One who intentionally suffered injury was excluded. To deter parties from bringing small cases to court, the first $10,000 of economic losses and the first $5,000 of pain and suffering were excluded from a tort award. A deductible was imposed to prevent small claims from burdening the system. Additional coverage was available at extra cost. A victim could recover full tort damages from someone other than a motorist, but must reimburse the no-fault insurer for benefits received. See generally M. Franklin, \textit{Cases and Materials on Tort Law and Alternatives} 800-01 (2d ed. 1979). The Keeton-O'Connell plan was not the only no-fault proposal that had been made, but it was the most comprehensive and significant study done up to that time on the subject. W. Prosser, \textit{Handbook of the Law of Torts} 566 (4th ed. 1971).

quire the complex determinations of causation that presently complicate settlement. Hence, this approach would minimize the difficulties inherent in sorting out both obscure distinctions between conclusive and inconclusive causation clauses,\textsuperscript{123} and problems associated with legal causation questions.\textsuperscript{124} Under this approach, policy liability would be based on loss due to damage resulting from, not caused by, an earthquake.

C. The Compulsory Approach is Compatible with Existing Risk Distribution Methods

Basically, the proposed plan would involve establishing a rate based on the factors that are currently used to determine earthquake insurance rates, namely by the geographic location (zone)\textsuperscript{125} and type of building construction.\textsuperscript{126} From this calculation, a multiplying factor could be developed to determine the probability that certain types of damage would result in the event of an earthquake.\textsuperscript{127} This

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\textsuperscript{123} See R. Keeton, \textit{supra} note 7, at 306-17.

\textsuperscript{124} Id. at 317-19.

\textsuperscript{125} The state of California is divided into eight earthquake insurance zones (A-H), for the purposes of PML studies. The zones are based on a probable maximum loss zone, defined in part by a fault, and in part by county boundaries. All but one zone are made up of more than one county. The two most intensely populated zones are the Metropolitan San Francisco and north coast (Zone A) and the Los Angeles-Orange Counties (Zone B). CEZ/PMLE Program Report (1981), \textit{supra} note 9, at 6-10. In addition, the Alquist-Priolo Special Studies Zones Act was enacted in 1972, and is codified in the Public Resources Code at §§ 2621-2630. The purpose of the Act is to prohibit the location of most structures for human occupancy across the traces of active faults and to mitigate thereby the hazard of fault-rupture. \textit{CAL. PUB. RES. CODE} § 2621.5 (West Supp. 1984). One section, in particular, states:

A person who is acting as an agent for a seller of real property which is located within a delineated special studies zone, or the seller if he is acting without any agent, shall disclose to any prospective purchaser the fact that the property is located within a delineated special studies zone.

\textit{CAL. PUB. RES. CODE} § 2621.9 (West Supp. 1984).

\textsuperscript{126} Buildings are classified by type of construction and size into approximately six major classifications, and up to 19 sub-classifications, depending on the particular breakdown being used. \textit{See}, \textit{e.g.}, K. Steinbrugge, \textit{supra} note 9, at ch. 5; CEZ/PMLE Program Report (1982), \textit{supra} note 9, at A6-A9. Generally, these classifications are used to determine rates and deductible amounts when computing earthquake insurance premiums. For example, a person with a small wood-frame house, less than four stories, would pay around $1.50 per $1,000 of coverage (depending upon which zone the house was situated in), whereas an unreinforced masonry or adobe building would run around $25 per $1,000 of coverage. P. Yanev, \textit{supra} note 11, at 234.

\textsuperscript{127} This proposal simply requires that the probability of a covered peril, such as fire, flood, or structural damage, be recomputed, taking into account the aforementioned zones and building classifications. An essential consideration would include various hazard mitigation efforts, such as local municipal code enforcement efforts, and the structural integrity of public safety buildings, etc. Premiums could be developed on an individual basis, or by general categories, with discounts offered for special hazard mitigation efforts. The resulting rate determi-
multiplying factor would then be utilized in determining premium rates.

For example, the probability of fire damage in a wood-frame house which uses natural gas and is located near a major, known fault trace would be higher than the probability of fire damage of a similar house located in another zone. As a result, it would be reasonable to charge a slightly higher rate for fire insurance for the first house. Also, rates for flood and other water damage could be adjusted to reflect potential damage, for example, where a house is located below a dam or irrigation levee.

By applying the probability of earthquake damage to a particular structure (a factor of the geographic zone and classification of building construction) to the schedule of covered risks (e.g., fire, collapse), a more realistic aggregate PML can be determined. While this would have the initial effect of raising the total amount of premiums required, by distributing the aggregate PML over a wider population, a more efficient and equitable distribution of risk could be achieved.

Once the aggregate PML and the premium rates are determined, a schedule of discounts could be developed to encourage implementation of hazard mitigation efforts, such as improved construction techniques and more stringent building code standards. Information about earthquake-resistant construction techniques and other mitigation measures is already available, and is presently used to modify the calculations for aggregate PML.

This approach would not only shift the focus of insurance industry resources and efforts from liability limitation to hazard mitigation, but would encourage competitive marketing strategies. The application of this concept could be expanded to municipal and county entities, to encourage communities to pool their resources and implement mitigation efforts, and thus help their residents to obtain more favorable rates. In fact, emergency preparedness measures taken by the local government entity, such as replacing antiquated public safety buildings and developing comprehensive disaster aid

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128. Such an approach would be compatible with the general program and objectives of the National Flood Insurance Plan (NFIP). See supra notes 85-87 and accompanying text.
129. See supra note 84 and accompanying text.
130. See, e.g., K. Steinbrugge, supra note 9, at 204-16.
131. For example, if studies by an insurance company proved that a certain construction technique or structural reinforcement process was particularly effective in withstanding earthquake damage, the company would have the option of offering a discount as an inducement to attract policyholders.
plans, should be a critical factor in the calculus to determine appropriate rates.\footnote{132}

In addition to discounts, a schedule of deductibles could be developed to eliminate "nuisance claims,"\footnote{133} and to allow policyholders some degree of flexibility in adjusting their own share of the risk. Claims adjusters will need to develop techniques to determine whether reported damage resulted from a particular earthquake event, from previous earthquakes, or from one or more aftershocks.\footnote{134} Insurers will have to determine if the deductible applies only to the initial tremor, or to individual aftershocks after a certain period of time. These problems presently exist anyway, and must be addressed eventually.

Application of a compulsory earthquake insurance plan would ideally result in a more equitable and efficient distribution of the risk. The total risk would be carried by all instead of a few, thus keeping the cost of premiums at a reasonable level. The amount of the premium would depend on factors related to the economic risk involved, and provide a mechanism for encouraging implementation of hazard mitigation measures, either on an individual or community-wide basis. This approach would allow insurance companies to utilize competitive marketing strategies to attract policyholders, and perhaps provide an incentive to the insurance industry to channel funds now spent in litigation into research and development of proven damage mitigation measures.

VI. CONCLUSION

The purpose of this comment has been to discuss some of the complex problems associated with interpreting exclusionary clauses to all-risk casualty homeowner policies, and to review the new provisions of the California Insurance Code requiring insurance companies to offer earthquake insurance to residential property owners.

\footnote{132. As demonstrated by the San Francisco earthquake and fire of 1906, the total amount of damages can be exacerbated by several factors in a significant earthquake, as destructive forces combine to create even greater losses. This synergistic effect can be lessened by an aggressive, community-wide program of building code enforcement, including public safety buildings such as fire stations, public shelters, and hospitals. Despite the existence of mutual aid agreements between cities and counties, a significant earthquake affecting a widespread area would quickly involve all available emergency resources, further reducing efforts at damage mitigation and rendering mutual aid agreements all but useless. See generally K. STEINBRUGGE, supra note 9, at 217-32 (describing in detail the events of several major earthquakes).}

\footnote{133. K. STEINBRUGGE, supra note 9, at 191-92.}

\footnote{134. Id.}
However, the new statute raises several new questions and leaves other questions unanswered, and appears to create certain ambiguities that will require additional litigation to resolve.

The lack of an adequate legal, legislative or administrative solution to resolve the issue of uncertainty prompts consideration of appropriate alternatives. The problems of risk distribution and loss allocation associated with automobile insurance are similar in many respects to the problems associated with earthquake insurance. In both instances, an apparently singular and relatively isolated event rises to the status of a major social problem, due to the large number of people affected and the difficulties in determining the source of the loss.

The Keeton-O’Connell compulsory no-fault plan, provides a unique approach that could be easily adapted to the earthquake insurance problem. A compulsory, no-fault plan, by its very terms, avoids the necessity to determine and litigate issues of negligence and causation, and instead provides basic, first-party compensation based on the economic loss resulting from the casualty. Such an approach would not only resolve the dilemma of uncertainty faced by insurers and policyholders, but would be fully compatible with other proposals and existing methods of risk distribution. Furthermore, by shifting the focus from causation to results, the compulsory approach provides an opportunity to channel available resources into hazard mitigation instead of litigation.

Ultimately, the burden of a natural disaster falls upon society as a whole, and the present system is wholly inadequate to deal with the issues of insolvency, uncertainty, and inefficiency. This proposed program, on the other hand, makes the best use of available information and resources, retains compatibility with planned and existing programs, and yet is flexible enough to respond to changes as they occur.

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