



## THE CALIFORNIA EARTHQUAKE AUTHORITY

October, 2009

### OVERVIEW

California has a long history of earthquake damage. The great San Francisco earthquake of 1906 and the 1989 Loma Prieta earthquake rank among the most significant earthquakes ever. The Northridge earthquake, which struck Southern California on January 17, 1994, was the most costly quake in U.S. history, causing an estimated \$20 billion in total property damage, including \$12.5 billion in insured losses. The insurance industry ended up paying out more in claims for this quake than it had collected in earthquake premiums over the preceding 30 years. While no insurer became insolvent, some came very close.

To recover their financial strength and to be better prepared for the next earthquake, most insurers began to limit their exposure to earthquakes by writing fewer new homeowners insurance policies. In addition, most insurers filed for both rate increases and increases in deductibles from the 10 percent that was current then to 15 percent or higher. This triggered a crisis that by mid-1996 threatened the vitality of California's housing market and stalled the state's recovery from recession.

In response to the crisis, legislators took two steps. By law, insurance companies that sell homeowners coverage in California must offer earthquake insurance too. In 1995, legislators specified that the minimum policy of earthquake insurance that residential insurers must offer is a catastrophic policy of property protection. This policy, known as the "mini-policy", effectively set a new minimum standard for coverage that must be offered to every residential policyholder in the state.

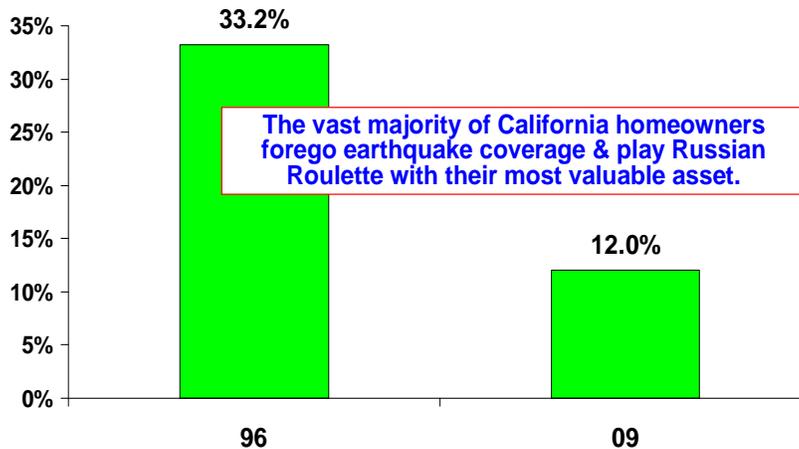
The second step taken by legislators was the establishment of the California Earthquake Authority (CEA) in 1996. The CEA is a privately financed, publicly managed entity that helps California residents to protect themselves against earthquake loss. Today, the CEA is one of the world's largest residential earthquake insurers. Acting through its participating insurers, the CEA sells earthquake policies exclusively to homeowners, mobile home owners, condominium owners, and renters throughout the state. The CEA is governed by a board comprised of five elected officials: California's governor, treasurer, insurance commissioner, speaker of the state Assembly, and chairperson of the state Senate Rules Committee. It is advised by a panel of insurers, agents and members of the public.

Some 17 insurers representing two-thirds of the California homeowners market participate in the CEA. According to data from Highline/National Association of Insurance Commissioners (NAIC), direct premiums written for earthquake coverage

in California totaled \$1.49 billion in 2008, including \$521.5 million in premiums written by the CEA. The CEA is the largest provider of earthquake insurance in the state with a 35 percent market share based on direct written premiums in 2008. The CEA has more than 796,000 policyholders located throughout the state.

The purchase of earthquake insurance by California policyholders is not mandatory. The percentage of policyholders buying the coverage appears to rise and fall depending on how long ago the last significant earthquake occurred. In 1996, about one-third (33.2 percent) of state homeowners purchased the coverage. Today, that number has dropped to around 12.0 percent (see Figure 1).

 **Percentage of California Homeowners With Earthquake Insurance, 1996 v. 2009\***



**Fig. 1**

Source: California Dept. of Insurance; Insurance Information Institute.

\*Includes CEA policies beginning in 1996.

Some homeowners, particularly those with little equity in their homes, appear to be forgoing earthquake insurance because of the high cost of premiums. Others believe the greatest threat they face after earthquake is fire, a peril for which they are covered under California's fire-following law. Still others do not purchase the coverage because they believe government aid will bail them out afterwards.

To encourage more policyholders to buy the coverage, in August 2005 the CEA approved an average rate cut of 22 percent, which went into effect July 1, 2006. This was the first rate change since 1998. The CEA noted that a sharp drop in the cost of reinsurance and several years without a major earthquake, allowing insurers to build up reserves, had made the rate cut possible.

## HOW IT OPERATES

CEA policies are sold only through the 17 participating insurance companies. Those insurers who choose not to participate must offer their own earthquake coverage to their residential property policyholders. Earthquake insurance provides coverage for damages to buildings and contents arising out of a seismic event. The insurance does not provide coverage for losses that may arise as a result of subsequent fire, explosion, water damage, glass breakage or theft. So, for example, a major fire such as the one following the great San Francisco earthquake of 1906 would not be covered.

Standard homeowners, condominium, and renters insurance policies do not generally cover earthquake damage. Coverage is available either in the form of an endorsement or as a separate policy for homeowners, renters and small business owners. The exception is earthquake damage to cars and other vehicles which is covered under the optional comprehensive portion of auto insurance policies. Most policies that non-CEA companies offer are similar in features to the CEA policy. To date, companies that sell over two-thirds of the residential property insurance in the state have opted to offer the CEA policy.

As noted before, the basic earthquake policy from the CEA is regarded as the industry's standard. The "mini-policy" is designed to provide basic protection against earthquake damage. The policy will pay to repair or replace the dwelling, subject to a deductible, but it excludes some items from coverage, including pools, patios, fences, driveways and detached garages. The standard deductible on a dwelling and its contents is 15 percent (based on insured value) and is applied to the total loss, not separately for each coverage. Only structural damage counts toward meeting a deductible. The policy pays up to \$5,000 to repair or replace personal property and provides \$1,500 for any additional, higher living expenses incurred if the home is uninhabitable while it is being repaired. There is no deductible for additional living expense/loss of use coverage.

Many CEA participating insurers also now offer new higher coverage limits to their policyholders. For an additional premium, up to \$100,000 in contents coverage and \$15,000 for loss of use are available. Homeowners and mobile home owners have an additional option of lowering their deductible from 15 percent to 10 percent. Condominium owners and renters are not eligible for a lower deductible but can purchase the higher limits for contents and loss-of-use coverages.

The CEA base policy also includes an additional \$10,000 in Building Code Upgrade coverage. For policies effective or renewing on or after July 1, 2006, homeowners can choose to increase this coverage by an additional \$10,000, for a total Building Code Upgrade coverage limit of \$20,000.

According to the CEA, the average annual premium in California for a CEA policy is \$707. Premiums vary widely among the rating territories, based on type of house, its age, the nature of the soil and proximity to known fault lines.

The CEA currently has a claims-paying capacity of \$9.6 billion. An earthquake that would exhaust the CEA's entire claims-paying capacity is regarded as unlikely.

**CLAIMS-PAYING CAPACITY AND THE CEA'S CLAIMS SYSTEM**

No state funds and no public money are used to finance the CEA. The CEA is funded from policyholder premiums, contributions from and assessments on participating insurers, returns on invested funds, borrowed funds, and reinsurance (insurance for insurers).

As of August 31, 2009 the CEA has a projected total claims-paying capacity of \$9.6 billion, which translates to a 1-in-553-year claims-paying capacity. However, if an earthquake were to cause insured damage greater than the CEA's claims-paying capacity then policyholders affected would be paid a prorated portion of their covered losses. The prorated claims would be calculated based on the total amount of expected claims compared to the remaining available funds.

The CEA claims-paying capacity is structured in layers (see Figure 2) and claims are paid from the lowest available layer in the financial structure.



**Total CEA Claims-Paying Capacity =  
\$9.6 Billion**

<b>Post-Earthquake Industry Assessment (New IAL) \$1.30 B</b>
<b>Post-Earthquake Industry Assessment (2<sup>nd</sup> IAL) \$1.47 B</b>
<b>Revenue Bonds \$.241 B</b>
<b>Reinsurance Layer \$3.1 B</b>
<b>Revenue Bonds \$.070 B</b>
<b>CEA Capital \$3.43 B</b>

**Fig. 2**

Source: CEA, as of August 31, 2009.

CEA capital amounts to \$3.43 billion, reinsurance layers total \$3.1 billion and there are two industry assessment layers (described below). There are also two revenue bond layers of \$241 million and \$70 million, to provide the CEA extra claims-paying capacity. The CEA purchases reinsurance from private reinsurers. However, reinsurers are not permitted to purchase retrocession without the permission of the CEA. Retrocession is the reinsurance of a reinsurance company. For 2009, the CEA purchased over \$3 billion in catastrophe reinsurance coverage.

The CEA's aggregate claims-paying ability is reduced by any claims payments regardless of when they occur. For example, with a claims-paying capacity of \$9.6 billion, if the CEA suffers a \$1 billion loss, only \$8.6 billion would remain available to fund a second loss. However, the surplus of the CEA does increase in each year in which there is no major event. All CEA earthquake claims are processed by CEA participating insurance companies.

### **INDUSTRY ASSESSMENTS**

Under its original structure, the CEA could assess participating insurers \$2.2 billion if a loss exceeded the capital of the CEA (but before the use of risk transfer financing). That agreement expired in December 2008, as required by a sunset provision in the statute that created the CEA.<sup>1</sup> From July 2008, Senate Bill 430 established the CEA's authority to assess participating insurers via a new industry assessment layer (New IAL).

The new \$1.3 billion industry assessment layer sits atop the second assessment layer (2<sup>nd</sup> IAL) in the CEA's financial structure. As a result, this new layer of funding is much less exposed to earthquake losses as it can be assessed only after available CEA capital, reinsurance and bond fund layers are exhausted.

Until now the likelihood of the second assessment has been considered remote given the low probability of a loss of such magnitude. Any assessment is limited to the amount necessary to pay the outstanding or expected claims of the CEA and to return the CEA's available capital to \$350 million.

Primary insurers can purchase reinsurance to mitigate their exposure to an industry assessment. However, there is no provision that allows insurers to recover through a premium surcharge or some other mechanism the cost of this reinsurance or any assessment.

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<sup>1</sup> Credit Suisse, *California Earthquakes – Secrets of the CEA*, 29 July 2008.