

CALIFORNIA EARTHQUAKE AUTHORITY

It Has Taken Steps to Control High Reinsurance Costs, but as Yet Its Mitigation Program Has Had Limited Success

REPORT NUMBER 2000-133, FEBRUARY 2001

California Earthquake Authority's response as of February 2002

Audit Highlights . . .

Our review of the California Earthquake Authority's (authority) reinsurance costs and State Assistance for Earthquake Retrofitting (SAFER) program disclosed:

- The authority's reinsurance costs are high, but not unreasonable compared to what other companies are paying.***
 - The authority has reduced its reinsurance costs by negotiating favorable contract terms and exercising contract options.***
 - As of December 2000 only 31 of 3,576 homeowners whose homes needed structural retrofits had made them.***
 - The remaining backlog of seismic inspections and assessments should be completed and mailed to homeowners by mid-May 2001.***
 - The authority has spent \$3.5 million on SAFER, which is within its statutory requirement.***
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The California Earthquake Authority's (authority) reinsurance costs in 1998 represented 90 percent of its policyholder premiums, prompting the Joint Legislative Audit Committee (audit committee) to request that we determine whether the total annual expenditures for reinsurance and capital market contracts constitute a reasonable and appropriate percentage of the authority's annual collected premiums. The audit committee also asked us to examine the authority's implementation of its State Assistance for Earthquake Retrofitting (SAFER) program, an earthquake mitigation pilot program, which is currently in its second phase. We found that:

Finding #1: The authority's high rate in 1998 was due to one-time factors.

In 1998 the authority's rate (the percentage of policyholder premiums it spent for reinsurance) was 90 percent, according to its audited financial statements. This was due primarily to reinsurance costs that were not allocated evenly over the life of its original two-year contract for the first \$1.4 billion of reinsurance coverage. The authority's member companies had existing earthquake policies that would be converted to authority policies over the course of its first year of operation. During that year, the authority's exposure level gradually increased until it reached its full amount when the conversion was complete. Therefore, the payment schedule was set up to reflect the fact that the authority would have considerably more risk to cover in 1998 than it had in 1997. Additionally, the contract for the remaining \$1.1 billion of reinsurance coverage required the authority to pay for two years of coverage in calendar year 1998. Therefore, although the authority's 1998 rate seems alarmingly

high, this rate is due primarily to a high reinsurance premium split unevenly over a two-year contract and a required up-front premium in the second contract.

Finding #2: The authority's capacity to pay claims relies heavily on costly reinsurance.

The authority maintains roughly \$2.5 billion in reinsurance coverage, which makes up about one-third of its capacity to pay policyholders in the event of an earthquake. Because catastrophe reinsurance is more expensive than other types of reinsurance, and because the authority must offer earthquake insurance to all qualified homeowners throughout the State, the reinsurance it purchases is costly. The authority's reinsurance costs are higher than other insurance companies because of its unique restrictions. By law, it must offer earthquake coverage statewide, so it cannot reduce its exposure to loss by limiting coverage in geographic areas that are highly prone to earthquake damage.

Finding #3: The authority has taken steps to reduce its reinsurance costs while maintaining the required amount of reinsurance coverage.

According to its lead reinsurance intermediary, hired by the authority to negotiate its reinsurance contracts, the rate-on-line (the amount of compensation the authority currently pays to reinsurance companies to assume part of its risk) is not unreasonable compared to what other companies are paying.

Nevertheless, the authority has negotiated with its reinsurers to reimburse a portion of the premiums on the first layer of reinsurance if they sustained no losses under the contract for calendar years 1997 through 1999. This, coupled with a reinsurance premium adjustment due to the authority's exposure falling below 90 percent of \$203.6 billion, resulted in a reinsurance refund of nearly \$82 million for its first three calendar years. The authority is also attempting to lessen its reliance on reinsurance by following the advice of its consultant to reduce the amount of coverage it buys and by testing its ability to transfer some of its earthquake risk into the capital market.

Finding #4: The authority faces critical challenges in the future.

The primary challenge that the authority faces is in maintaining its claims-paying capacity. Its reinsurance contracts will expire in the next two years and its authority to assess its member companies up to \$2.2 billion when losses exceed its capital will expire in December 2008.

To ensure that it maintains its claims-paying capacity, we recommended the authority continue to monitor the reinsurance market and research alternative financing to reduce its dependence on reinsurance.

Authority Action: Corrective action taken.

The authority reported that its governing board and staff continue to look for ways to reduce the costs of risk transfer in general and reinsurance in particular. For example, one proposal is to purchase less reinsurance in 2003 than in previous years. In addition, the authority's staff continues to monitor, research, and discuss with its governing board, various alternative financing methods such as catastrophe bonds. Following the events of September 11, 2001, and anticipating insurance and reinsurance market disruptions, the authority formed a high-level reinsurance task force to monitor closely the fast changing market developments. The authority plans to continue to draw on these experts to monitor reinsurance pricing and market conditions.

Finding #5: The authority has not yet captured sufficient data to assess the State Assistance for Earthquake Retrofitting (SAFER) program's effectiveness in achieving retrofits.

The authority has not yet found an effective mix of incentives to encourage homeowners to retrofit their homes, and the number of homes that have been retrofitted is low. Thus, although the authority has spent approximately \$3.5 million for the SAFER program, it cannot demonstrate it has achieved its ultimate goal of reducing the State's risk of personal and business economic loss from earthquakes. As of December 8, 2000, only 31, or 0.9 percent, of 3,576 homeowners whose homes needed structural retrofit improvements had completed the needed improvements through the SAFER program. Another 54 homeowners had begun the retrofitting process, but the work

was not complete. A telephone survey in January 2001 of 300 homeowners who participated in the SAFER program needs more analysis before the authority can use it to estimate how many other homeowners who received seismic assessments through the SAFER program made some or all of the necessary improvements but did not report them.

Finding #6: The authority has reduced the backlog of seismic assessments for homeowners.

Between October and December 1999, after a great deal of media attention, the SAFER program received nearly 17,000 telephone calls from interested consumers, resulting in 8,304 qualified homeowners interested in receiving a seismic assessment of their homes. To meet this unexpected demand and the resulting backlog of inspections, the authority increased the number of engineering firms that conduct the inspections and prepare assessment reports. As of early December 2000, the authority had spent about \$3.5 million for its earthquake mitigation program, had completed roughly 68 percent of the home inspections, and had sent 86 percent of these homeowners their assessment reports. According to the authority, the remaining inspections and assessment reports should be complete and mailed to homeowners by mid-May 2001.

To ensure that the goal of the mitigation program is achieved, we recommended the authority establish a system for determining how many homeowners who participate in the SAFER program complete the recommended retrofit improvements. The authority should also establish a target number of homes to be made seismically secure so it can demonstrate that the goal of the program has been achieved. Until these elements are in place, the authority should delay expanding the program.



Authority Action: Partial corrective action taken.

The authority is redesigning its SAFER program database to provide the capability of tracking and monitoring the status of individual homeowners in the retrofit process. Database modifications are being made so that projects can be sorted in a variety of ways, which the authority states will allow it to better monitor and track each retrofit improvement. The water heater program is currently using the new features of the database and a full conversion will be completed before any new SAFER program is launched. Further, the authority states that after the SAFER program completed 7,117 assessments, it

conducted a thorough analysis of program participants, which allowed it to better understand the actions program participants did or did not take following their SAFER assessment.

As of February 28, 2002, the authority had not established a target number of homes to be made seismically secure by which it can demonstrate that the goal of the program has been achieved. However, the authority is exploring options to include public and private partnerships to expand the reach and effectiveness of the mitigation program. Assuming that additional funding from other sources is secured, the authority's goal over a two-year period is to educate 20,000 single family homeowners as to their seismic risk and motivate them to take action.

To further encourage homeowners to protect their homes from the peril of earthquakes, we recommended the authority continue to research why more homeowners who received assessment reports have not followed through with retrofitting their homes. Once the authority identifies the reasons, it should make appropriate changes before expanding the program.

Authority Action: Corrective action taken.

To encourage more homeowners to retrofit their homes, the authority has elected to enhance the SAFER program by narrowing its requirements to focus on single-family homes that can most benefit from seismic retrofitting. In addition, the program will continue to offer free preliminary seismic assessment reports, but will also significantly subsidize other steps in the retrofit process, which should encourage more homeowners to retrofit their homes. For example, the homeowner will pay \$250 for engineering plans while the SAFER program pays the remaining \$200. The SAFER program will also pay 15 percent of the costs, up to \$1,800 of actual retrofit construction and the final verification report.

We also recommended that the authority continue to use the information in the SAFER database to develop a strategy to increase the number of retrofits performed as a result of the SAFER program.

Authority Action: Corrective action taken.

The authority states that it conducted a thorough analysis of program participants and now better understands why program participants did or did not make the retrofit improvements recommended in their seismic assessment reports. The authority found that more people in the water heater program declined rather than accepted additional assistance to retrofit. As a result, the authority concluded that mitigation funds could be more effective if spent offering a new program to people with a stated interest and desire to retrofit. The authority will continue to work with homeowners who participated in the pilot program who have a desire to retrofit, but will be looking for homeowners in the San Francisco Bay Area who were unable to participate in the initial pilot program. In addition, the authority will continue to track participants as a means of determining what motivates homeowners to retrofit.

Finally, we recommended that the authority pursue clarification of its enabling statute to determine whether its limit of 25 staff includes those who work solely on the earthquake mitigation program or whether the program's staff are in addition to the 25 staff the authority is allowed.

Authority Action: Corrective action taken.

The authority plans to contract for more assistance in running its earthquake mitigation program and expected to hire an assistant for the program's manager by March 2002. Further, the authority's governing board has authorized staff to pursue legislation that would re-examine the statutory cap on the number of authority employees. As of February 28, 2002, legislation related to the authority was awaiting amendments and deliberation in conference committee. Additionally, the governing board agreed to retain the services of a registered lobbyist as needed in 2002.