

United States General Accounting Office Washington, D.C. 20548

#### **General Government Division**

B-258682

November 7, 1994

The Honorable Daniel K. Inouye United States Senate

Dear Senator Inouye:

Thank you for the opportunity to comment on changes you are considering to S. 1350, the Natural Disaster Protection Act, and whether these changes would enhance the effectiveness of the primary insurance and reinsurance programs contained in the bill. We share your interest in exploring ways to reduce the loss of life and property and the economic consequences of future natural disasters, including reliance on government disaster assistance. The multihazard disaster mitigation and insurance programs proposed in S. 1350 represent one approach for accomplishing these objectives.

In our May 26, 1994, written statement<sup>1</sup>, we expressed several concerns regarding the ability of the primary insurance and reinsurance programs proposed in S. 1350 to fairly and efficiently spread insured disaster risks among policyholders, insurance companies, and the federal government. While the changes outlined in both your July 22, 1994, letter and the July 18, 1994, redlined version of the bill may enhance aspects of these insurance programs, we continue to have concerns regarding both programs. We are providing you with our analysis of the changes you are considering within the context of the concerns we raised in our initial statement.

Federal Disaster Insurance: Goals Are Good, But Insurance Programs Would Expose The Federal Government To Large Potential Losses (GAO/T-GGD-94-153, May 26, 1994)

## GREATEST CONCERNS WITH PRIMARY INSURANCE PROGRAM REMAIN

Our greatest concerns with the primary insurance program proposed in S. 1350 involved the difficulty in setting affordable actuarially sound rates and in attaining a high enough level of participation to effectively spread risk and significantly reduce the cost of multihazard In considering these concerns, you said that coverage. recent advances by the insurance industry in computer modeling techniques enable insurers to better predict expected losses from natural disasters. You also proposed creating an independent rate-making commission comprising professional actuaries who would certify all proposed rates to be actuarially sound and requiring that the multihazard coverage be purchased by all homebuyers who reside in earthquake and volcaniceruption prone states and have a federally related mortgage, as defined in the revised bill. However, despite technological advances in computer modeling and the proposed changes to S. 1350, our fundamental concerns remain.

### Recent Advances in Computer Modeling Techniques

Insurers are increasingly using computer-generated models of various types of natural disasters to better understand their risk exposures and potential losses from these events. Although these computer modeling programs may enhance insurers' ability to predict losses and thus better price the risks they accept, setting actuarially sound rates for earthquake and volcano risks will continue to be difficult due to data limitations.

Computer catastrophe models enable insurers to simulate thousands of scenarios under which catastrophic events may occur. To simulate these events and estimate resulting losses, numerous assumptions are made including the location, magnitude, and probability of various events. Making these assumptions about earthquakes is difficult because they are extremely unpredictable and only limited data exist on past events. Furthermore, not all fault lines in the United States have been identified, making the earthquake risk in some areas of the country even harder to predict. As data for volcanoes are even more limited than for earthquakes, developing assumptions for these events would be that much more difficult. To the extent that

assumptions underlying the catastrophe models are based on incomplete or inaccurate data, the results may not be reliable.

A recent example of these data limitations is the January 1994 earthquake in Northridge, California. According to A.M. Best, the Northridge earthquake occurred on an inactive fault line that was practically unknown to the insurance industry. Further, it was a rare type of quake for which little information existed, thus limiting the ability of many catastrophe computer models to predict probable losses.<sup>2</sup>

# Creation of an Independent Rate-Making Commission

S. 1350 would be revised to establish an independent rate-making commission responsible for developing and periodically adjusting the actuarially sound rates for both the primary insurance and reinsurance programs. The commission would be called the Natural Disaster Insurance Rate-Making Commission and would comprise five independent, professional actuaries.

Creating an independent entity to set rates, rather than placing that responsibility with an executive agency as previously proposed, may insulate the rate-setting process from potential political pressure to set rates at affordable levels that may be less than actuarially sound. However, although the commission may be able to independently set rates, determining actuarially sound rates for earthquakes and volcanoes would still be difficult due to the data limitations cited above.

## Primary Insurance Purchase Requirement

Improving the affordability of earthquake and volcano insurance can occur only if the risks are shared among a large number of individuals. To enhance participation in the primary insurance program, S. 1350 would be revised to require homeowners who reside in earthquake and volcanic eruption-prone states and have a federally

<sup>2&</sup>quot;Northridge Quake's Estimated Cost to Insurers Hits
\$5.3 Billion", BestWeek - Property/Casualty Supplement,
April 11, 1994, pp. P/C 1.

related mortgage<sup>3</sup> to purchase the multihazard coverage provided under the program. In addition, an insurer participating in the primary insurance program would be required to add the multihazard coverage to the insurance policies for all its residential property policyholders residing in earthquake and volcanic eruption-prone states.

These changes could enhance the rate of participation in the primary insurance program. However, whether these additional requirements would result in the broad participation needed to significantly reduce the cost of coverage remains questionable for two reasons. First, according to Federal Emergency Management Agency (FEMA) officials, the proposed mandatory purchase requirement would affect approximately 40 percent of all homeowners in the affected states. Consequently, the remaining homeowners could still purchase earthquake-free insurance from insurers not participating in the primary insurance program. If homeowners in this latter group perceive their risk to be less than the cost of the multihazard coverage, they may seek out nonparticipating insurers. This may be particularly true for homeowners living in parts of the United States where earthquakes are possible but have a relatively low probability of occurrence.

Second, because of difficulties in enforcing the mandatory purchase requirement, full compliance is questionable. The experience of the National Flood Insurance Program (NFIP), which has a similar insurance purchase requirement, shows that due to enforcement problems the mandate has not been as effective as it was intended to be and participation is low. The revised S. 1350 does not contain any mechanism for enforcing the purchase requirement. Without an effective enforcement mechanism, the potential for increasing participation through this mandate could be severely limited.

<sup>&</sup>lt;sup>3</sup>As defined in the revised bill, federally related mortgages include all mortgages backed or insured by a federal instrumentality or sold to Freddie Mac or Fannie Mae.

# Premium subsidies

In the absence of widespread participation, there may be little improvement in the affordability of earthquake and volcano coverage. Even if the proposed mandate could increase participation substantially, the extent to which rates would be affected is unknown. In particular, homeowners of non-mitigated houses may consider premiums that truly reflect their catastrophic exposure too costly even with broader participation, and they may not buy the multihazard coverage.

NFIP uses premium subsidies to encourage participation by people living in high-risk areas who otherwise could not afford to pay risk-based premiums. In that program, the premium applied to subsidized policies is almost two times greater than that applied to nonsubsidized policies. However, it is only one-third of what the actuarially sound rate would be for the structures covered by the policy. We are not taking a position on whether the proposed primary insurance premiums should be subsidized. However, because of the experience of NFIP, we question whether participation would be higher or the need to subsidize premiums lower under the primary insurance program than is the case with NFIP.

# REMAINING CONCERNS WITH PRIMARY INSURANCE PROGRAM PARTLY ADDRESSED

Our remaining concerns with the primary insurance program were the extent to which cross-subsidization among policyholders could be minimized; the lack of incentives for individual companies to underwrite conservatively, minimize administrative expenses, or prudently adjust claims; and, finally, the ability of insurers to "cherry-pick" lower risks for themselves. These concerns would be addressed, in part, by the changes you are considering. However, some of the proposed revisions may need additional detail and clarification.

# Minimizing Cross-Subsidization

The revised S. 1350 would delete the prohibition against using premiums collected under the primary insurance program to establish highly specific rating districts. This change would eliminate an apparent inconsistency

with other provisions in the bill aimed at minimizing cross-subsidization and establishing risk-based premiums.

Lack of Incentives for Individual Companies to Underwrite Conservatively, Minimize Administrative Expenses, or Prudently Adjust Claims

According to your letter, your intention was to have the primary insurance program operate in a manner similar to the Write Your Own (WYO) portion of NFIP. We have not done sufficient work to comment on whether this program adequately ensures that insurers underwrite conservatively, minimize administrative expenses, and prudently adjust claims. We last reviewed the management controls of the WYO portion of NFIP in 1987.4 At that time, the Flood Insurance Administration had not fully implemented its initial reporting and review requirements for participating insurers. Nonetheless, the enabling legislation for NFIP contains greater detail than that proposed in S. 1350 regarding reimbursement for insurance-related administrative and operating expenses and loss adjustment expenses. 5 We would suggest consideration of similar provisions for S. 1350.

# Ability of Insurers to Cherry-Pick Good Risks

The revised S. 1350 would delete the provision allowing participating insurers to offer, at federally established rates, either the federally backed coverage or equivalent coverage on their own behalf. Your letter states that the intent of the proposed change is to eliminate the ability of insurers to cherry-pick the lower risks for themselves. However, other proposed changes appear to conflict with this intent.

Specifically, insurers would be required to add the multihazard coverage to the insurance policies for all their residential policyholders located in earthquake and volcanic eruption-prone states. However, the proposed language does not clearly specify that the

<sup>&</sup>lt;sup>4</sup>Flood Insurance: Private Companies' Participation in the Write Your Own Program (GAO/RCED-87-108, May 29, 1987).

<sup>&</sup>lt;sup>5</sup>42 U.S.C. §§4018, 4019.

multihazard coverage must be the same coverage that is offered under the federal primary insurance program. Furthermore, the revised definition for multihazard coverage deletes the requirement that the coverage be issued on Federal paper. In addition, a homeowner can satisfy the proposed mandatory purchase requirement by purchasing "the multihazard coverage provided under this subtitle or equivalent insurance from a private insurer...." It is unclear to us from the language in these proposed revisions that they would eliminate insurers' ability to cherry-pick lower risks. We suggest the language be changed to clarify that participating insurers would provide only the multihazard coverage available through the federal primary insurance program.

# GREATEST CONCERN REGARDING REINSURANCE PROGRAM REMAINS

Our greatest concern with the originally proposed reinsurance program was that the basis for triggering federal reinsurance payments to private insurers and reinsurers would have raised the federal government's exposure to disaster losses while limiting the exposure of the insurance industry and individual firms. S. 1350 would be revised to cap the reinsurance fund's borrowing authority, but the reinsurance triggers in the bill would not be modified. Although your proposed limitation on borrowing from the U.S. Treasury may limit the federal government's exposure to disaster losses, we remain concerned about the potential effects of the triggers.

Specifically, the reinsurance triggers in the bill continue to be based on the amount of surplus held by the industry and by individual companies. As a result, the basis for determining when the fund would become liable for payment of disaster losses could still be subject to insurer manipulation that could result in substantial increases in the fund's liability. Your letter suggests that existing supervision and regulation

<sup>&</sup>lt;sup>6</sup>The term "Federal paper" is undefined in S. 1350. However, it is our understanding that the term was intended to specify that the federal government, rather than private insurers selling the coverage on their own paper, would be liable for all losses under the multihazard coverage provided through the primary insurance program.

would make it difficult for insurers to manipulate their surplus levels. However, in spite of these controls, we have identified, in numerous reports, serious problems in the oversight of the insurance industry. We have been particularly concerned about the ability of state regulators to determine the financial condition of insurers when statutory accounting requirements and, consequently, surplus vary by state.

In addition, because the industry trigger would not be changed, the actual losses paid by insurers could still be considerably less than those needed to trigger reinsurance payments. Further, because the individual company trigger would also not be changed, the reinsurance program, backed by the federal government, would still, in effect, protect the solvency of individual insurers from most of the consequences of large natural disasters.

## OTHER UNRESOLVED CONCERNS WITH REINSURANCE PROGRAM

Our remaining concerns with the proposed reinsurance program included (1) FEMA's lack of authority to deny federal excess reinsurance to eligible companies, regardless of the companies' condition, business practices, or any other factor; and (2) the questionable inclusion of certain types of losses that would qualify for reimbursement. The revised S. 1350 would partly address our first concern, but not the second.

Specifically, you propose to give FEMA authority to deny federal excess reinsurance coverage to insurers based on ratings the insurer received from A.M. Best. If the insurer is not rated by A.M. Best, the insurer would be required to obtain a certification of financial soundness from its state insurance regulator to qualify for the excess reinsurance coverage. Should a bill be passed, it would be appropriate that FEMA have the authority to deny reinsurance to companies that may be in questionable financial condition. However, rather than requiring FEMA to rely solely on the opinion of one private rating agency or state insurance regulator, FEMA should be given discretion to determine the circumstances that would warrant denial of coverage.

<sup>&</sup>lt;sup>7</sup>A list of our reports on the solvency and regulation of the insurance industry is appended to our May 26, 1994, written statement.

The revised S. 1350 would not change the types of losses that would qualify for reimbursement from the proposed federal reinsurance program. Consequently, we continue to be concerned about the possibility of (1) federal subsidization of state guaranty funds and residual pooling arrangements, (2) insurers recouping guaranty fund assessments twice, and (3) reduced incentives for insurers to diligently assess the quality and collectibility of their private reinsurance arrangements or to actively pursue delinquent reinsurers through legal means.

We hope that these comments will be useful in your deliberations regarding proposed or future changes to S. 1350. Although some of the proposed changes may enhance aspects of the insurance programs contained in the bill, we continue to question whether S. 1350 would accomplish the goals of improving hazard mitigation and reducing the federal government's financial exposure to natural disasters.

Please contact me at (202) 512-8678 or Lawrence D. Cluff, Assistant Director, at (202) 512-8023 if you have any questions concerning our comments.

Sincerely yours,

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Associate Director, Financial Institutions and Markets Issues

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